

RELATIVIZATION IN BENGALI

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Ph.D.

University of Edinburgh

1982



Declaration

This thesis was composed by myself, and the work recorded in it is my own.

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Abstract

The process of relativization has been investigated in the present study to determine the characteristics of different types of relative clause in Bengali, the distribution of relative pronouns and the movement of major constituents in the relative clause. Recent work in transformational grammar has been taken into account; but more emphasis is placed on the descriptive framework of relative clauses than on the theoretical aspects. A short background, showing the development of Bengali and its major syntactic features, has been given in the introduction, where there is also an account of different transformational studies that are relevant in explaining relative clauses. In the four chapters following the introduction, a detailed study has been made of the different types of noun phrase that can become the head of a relative clause in Bengali, the occurrence and distribution of relative pronouns in relative clauses, the nature of the relative pronouns, the different types of relative clause, and the relationship between relative clauses and complement constructions. The last two chapters (preceding the conclusion) deal with some theoretical aspects of relative clauses. In these chapters the movement and deletion of the major constituents in relative clauses and the clefting rules have been explained. A summary is given in the last chapter to show the findings of the present study.

Abbreviations used in Bibliography

- AL: Archivum Linguisticum. Mansell Publishing, London.
- FL: Foundations of Language. International Journal of Language and Philosophy, Dordrecht-Holland.
- IJAL: International Journal of American Linguistics.
The University of Chicago Press, Chicago:
Illinois.
- IL: Indian Linguistics. Journal of the Linguistic Society of India, Poona.
- JL: Journal of Linguistics. The Journal of the Linguistic Association of Great Britain, London.
- LA: Linguistic Analysis. Elsevier North Holland, New York.
- LI: Linguistic Inquiry. Cambridge Massachusetts.
- Lg: Language. Journal of the Linguistic Society of America, Baltimore.
- SL: Studies in Language. John Benjamins B.V.
Amsterdam.
- SLS: Studies in Linguistic Sciences. Department of Linguistics. University of Illinois.

Acknowledgments

I would like to express my gratitude to those who directly or indirectly have assisted me in the completion of the present work. It only became possible for me to undertake this work when I was awarded a Scholarship for three years by the Postgraduate Studies Committee, University of Edinburgh, for which I am deeply indebted to them. I am also grateful to the Dacca University for granting me study leave for the required period to complete my work and for allowing me to retain the University flat during my absence abroad.

My greatest debt in preparing the work is to my supervisor Professor R.E. Asher, for his everlasting patience and scholarly guidance. He made thoughtful comments and criticisms on every page, and even found time to read and discuss my work during his sabbatical leave. His views are reflected throughout the thesis. I am also very grateful to Dr. J.E. Miller, who supervised my research for two terms in my third year during Professor Asher's sabbatical leave and passed on to me some of his knowledge in syntax, reading carefully every page, making detailed comment and displaying a most helpful enthusiasm for the subject. Both Professor Asher and Dr. Miller provided insights into the structure of Bengali which helped me to improve many parts of the dissertation.

I am grateful to my wife for taking care of our

daughter, for shouldering all burdens of the family and for encouraging me to complete the work. My thanks go, too, to our daughter, who just started her schooling but did not forget to write to me.

I would like to thank my landlady Miss Inge H. Gerstl for her encouragement in my work, providing home-made jelly and cake, inviting me for evening parties at her work and for arranging trips to see Scotland to forget the boredom of work.

Ms. Alison Jones has done a wonderful job of typing the thesis in a very short time.

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CHAPTER ONE

Introduction

1.1 Background

1.1.1 Introductory

Bengali is an Indo-European language and a member of the Indic group of the Indo-Aryan language family, and thus a direct descendant of Prakrit, and therefore of Sanskrit. Bengali is spoken by 150 million people in Bangladesh, West Bengal, and some parts of Assam, Tripura, Orissa and Bihar (India).

Bengali is written in a distinct alphabet of the Devanagari Script. Like many other languages of South Asia, it has a wide range of social and regional dialects. Though Standard Colloquial Bengali is spoken by the bulk of the educated class both in Bangladesh and West Bengal, there exist several divergent dialects of Bengali. Phonological and morphological differences render some of them unintelligible to SCB speakers. The survival of the Bengali dialects is attributable to political and cultural causes. During the last two centuries, until the partition of Bengal into Bangladesh and West Bengal (India), Calcutta was the focal area of SCB. Though Bengali was spoken throughout the province, social, political and regional factors blocked the widespread use of SCB. Dialects developed in different parts of the province, among them the Chittagong

and Noakhali dialects in the south, Sylhet and Rangpur in the North and North-west, Midnapore and Bankura in the West, and East Bengali dialects in Dacca and Mymensingh. Moreover, educated Bengali in Calcutta formed typical linguistic patterns, which were largely unknown in other parts of undivided Bengal.

The outline of the major dialect groups of Bengali in Bangladesh can be handled in terms of a division into the following classes:

- (1) a. Northern Bengali: The dialects of Dinajpur, Rajshahi, Bogra and Pabna.
- b. Rajbangshi: The dialects of Dinajpur.
- c. Eastern Bengali: The dialects of (i) Dacca, Mymensingh, Tippera, Sylhet; (ii) Faridpur, Jessore, Khulna.
- d. Southern Bengali: Chittagong, Noakhali, Cakma.

The dialect situation in Bangladesh and West Bengal can be shown diagrammatically, thus:

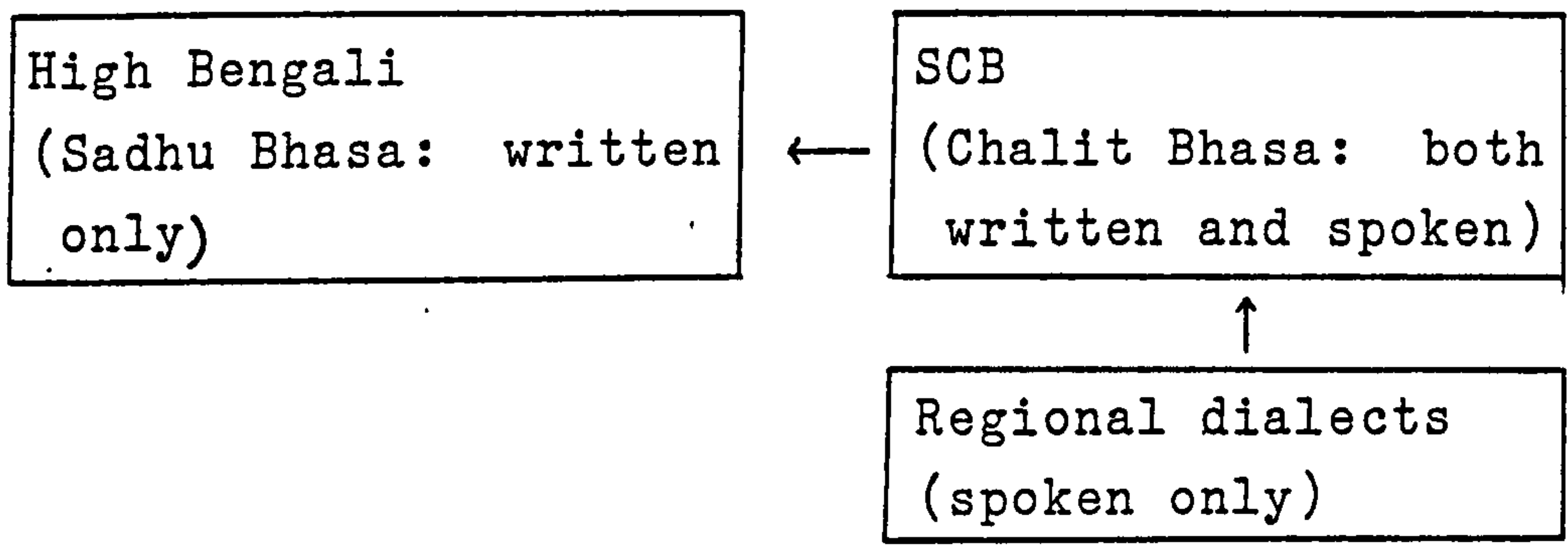


Figure 1 Three varieties of Bengali Speech forms

High Bengali (HB) is the Sanskritized written form of the language and is not spoken by anyone. SCB is commonly spoken and written by the educated class. Regional dialects are spoken mainly in their respective communities by different groups. A person who comes from a non-standard (non-SCB) speech area uses three different varieties of the language: regional dialect at home, SCB for inter-dialectal encounters, and HB for educational purposes. This tendency is changing rapidly, as most of the modern writers and authors of textbooks are following SCB written patterns in their books. HB and SCB are the only two distinct varieties used by a SCB speaker. A sample example of lexical variations between the three varieties of Bengali is shown here:

(2)	HB	SCB	Dialect (Noakhali)	Gloss
	sae lok	sala	hala	brother-in-law
	citra	chobi	ty obi	picture
	puttra	chele	ty aoal	son/boy
	konya	meye	maia	daughter/girl
	prabhat	sokal	bian	morning
	mastak	matha	mata	head

The difference between HB and SCB lies mainly in the lexical variations of the language, HB having more non-reduced words from Sanskrit. A few examples are given here to show the lexical patterns of HB and SCB.

(3) a. Verbal forms:

HB	SCB	Gloss
koriachilo	korechilo	(he/she/they) did
khaiachilam	kheechilam	(I/we) ate
bokiachilam	bokechilam	(I/we) rebuked
jaibe	jabe	(he/she/they) will go
maribo	marbo	(I/we) will beat
koritechī	korchi	Ist person Progressive

b. Pronominal Forms:

HB	SCB	Gloss
tahara	tara	they
tomadigoke	tomader	your
tahader	tader	their

c. Plural Markers:

-guli	-gulo	-s
-digake	-der	-s

d. Noun Forms:

mastak	matha	head
candra	cād	moon
hasti	hati	elephant

1.1.2 Oldest Specimen of Bengali

The first extant works of Bengali are 'Charyapadas', mystic songs written by the Buddhist poets some time in the seventh century. Sastri (1907) discovered the manuscript of the 'Charyapadas' in Nepal, where it was perhaps brought at the time of the insurrection of the Buddhists in India. The 'Charyapadas' uniquely present the old form of Bengali. The following is a specimen:

(4) ũca ũca pabot tãhi basoi sabari bali
 high high mountain there dwell Sabari girl
 moronggi piccha parhina sabori gibate gunjari mali
 peacock feather wearing Sabari neck catechu garland
 umato saboro pagolo saboro ma kara guli guhara
 exhilarated Sabara mad Sabara not do noise
 tohari
 your
 nia gharini name sahajo sundari
 house-wife name simple pretty

'The Sabari girl resides on the high mountain
 She is wearing peacock feathers and catechu garland
 on her neck
 Oh exhilarated Sabara! Oh mad Sabara! don't make noise
 against her
 She is your house-wife who is simple and pretty'

After the 'Charyapadas', written Bengali is represented by the twelfth-century 'Srikrishnakirtan', a

long narrative poetical work by Baru Chandidas, which was followed by the translations of the Rāmāyaṇa, Mahābhārata and Bhagavadgita in Bengali along with the original writings of Saghir's 'Yousuf and Zulekha'.

The distinctive stages of the development of Bengali can be shown in the following way:

- (5) a. Old Bengali: 750 - 1200 A.D.;
- b. Middle Bengali: 1201 - 1799 A.D.;
- c. Modern Bengali: 1800 onwards.

1.1.3 Word Groups in Bengali

The same SCB variety is spoken at present in Bangladesh and West Bengal. It is used by most of the educated speakers, and is the basis of the present dissertation. The SCB words that are commonly used in the spoken and written system have four different word stocks. These may be called as the Tatsama (Sanskrit), Tadbhava (derived from Sanskrit), Deshi (Indigenous) and Bideshi (foreign origin). Tatsama words that are used in Bengali are Sanskritized words and are retained in the language without changing their structure. Tadbhava words, derived from Sanskrit, have undergone many changes in the last few centuries (and are the most common words in Colloquial Bengali). Deshi words are those which do not have any direct or indirect relation with the Sanskrit lexicon and have survived in Bengali from the Non-Aryan speech of the

early settlers in Bengal or from the neighbouring provinces. These may also be classified as foreign loan words. Bideshi words are borrowed from the other speech communities outside Bengal (India) and mostly from the foreign settlers or through the direct contact in trade and culture. Most of the foreign words that are used in present-day Bengali are Persian, Arabic, French, Portuguese and English. A few examples are given here of the four word groups retained in Bengali.

(6) a. Tatsama (Sanskrit words):

kriṣṇa	'black'
sarpa	'snake'
matsa	'fish'

b. Tadbhava (derived from Sanskrit):

<u>Sanskrit</u>	<u>Bengali</u>	<u>Gloss</u>
māta	ma	mother
bāghra	bagh	tiger
vivāha	bie	wedding
puṣpa	phul	flower

c. Foreign Loan Words:

(i) deshi (Indigenous):

peṭ	'stomach'
caṇa	'fresh'
cinre	'shrimp'
cal	'husked rice'
hāk	'loud call'

(ii) Bideshi (Foreign)

dorbar	'court'
asami	'prisoner'
setar	'sitar'
kagoc	'paper'
hindu	'Hindu'

1.1.4 Loan Words in Bengali

Bengali has been considerably influenced by Dravidian, Munda, Santal, Kol, Bhil languages, as well as by English, Persian, Arabic, Portuguese and French. A few foreign loan words used frequently in Bengali are shown here.

(7) a. English:

Tebil	'table'
cear	'chair'
Tul	'stool'
laiT	'light/lamp'
gæs	'gas'
skul	'school'

b. Persian:

goenda	'spy'
cakor	'servant'
calak	'clever'

căda 'subscription'

băndor 'port'

c. Portuguese:

ispat 'steel'

cabi 'key'

janala 'window'

toale 'towel'

jisu 'Christ'

saban 'soap'

girja 'church'

d. Greek:

surongo 'tunnel'

e. French:

kartuj 'cartridge'

restōra 'restaurant'

kaphe 'cafe'

kupon 'coupon'

semij 'chemise'

f. Dutch:

ruiton 'diamonds'

hōrton 'hearts'

iskapon 'spades'

g. Arabic:

ojuhat 'excuse'

gorib 'poor'
julum 'torture'
sinduk 'chest'

h. Chinese:

ca 'tea'

i. Japanese:

riksha 'rickshaw'

1.2 Outline of Relevant Aspects of Bengali Syntax

1.2.1 Sentence Structures of Bengali:

This section provides an outline of Bengali sentence structure in non-transformational terms.

Bengali sentences have a SOV structure. For special stylistic purposes, and due to the relative free word-order of the sentence, the SOV pattern can be altered. This is explained in detail in the Gapping section in the present dissertation (Chapter 6). An indirect object normally precedes a direct object, though this order may also be reversed. A few examples are given here to show the word-order in a sentence.

- (8) a. mohua mouke boi dieche
 Mohua Mou-to book given-has
 'Mohua has given a book to Mou'
- b. mouke mohua boi dieche
 Mou-to Mohua book given-has
 'To Mou Mohua has given a book'
 ['Mohua has given a book to Mou']
- c. mohua boi dieche mouke
 Mohua book given-has Mou-to
 'Mohua has given a book to Mou'
- d. mou boi porche
 Mou book reading
 'Mou is reading a book'

The four examples that are given in (8) show the different possibilities for sentence patterns in Bengali. (8d) shows the SOV pattern of the sentence, where mohua 'Mohua' is the subject of the sentence, boi 'book' is the object of the verb, and porche 'reading' is the verb. The occurrence of a direct and an indirect object is shown in (8a), where mohua 'Mohua' is the subject, dieche 'has given' is the verb, which occurs at the end of the sentence, mouke 'to Mou' is the indirect object and boi 'book' is the direct object of the verb. Deviation from the basic sentence pattern is illustrated in (8b) and (8c). The indirect object stands at the beginning of the sentence (8b) without changing the meaning of the sentence. In (8c), the indirect object occurs at the end of the sentence, preceded by the verb.

Though the grammatical subject normally occurs at the beginning of a sentence, it can be placed elsewhere in the sentence without affecting the meaning. Three possibilities for the occurrence of a subject are shown in the following examples:

- (9) a. mohua sɔkalbæ lae boi porche
 Mohua morning-in-the book reading
 'Mohua is reading book in the morning'
- b. sɔkalbæ lae boi porche mohua
 morning-in-the book reading Mohua
- c. sɔkalbæ lae mohua boi porche
 morning-in-the Mohua book reading

(10i) shows the grammatical sentence and the occurrence of the direct object without any particle and determiner as no indirect object occurs in the sentence.

1.2.2 Basic structures of Simple Sentences in Bengali

A simple declarative sentence of the commonest type in Bengali consists either of one or two nouns and a finite verb. When two nouns occur in a sentence and the basic word order is followed, the first noun is the subject, the second noun the object of the verb and the verb is placed finally in the sentence. In the case of the occurrence of a single noun, this will be the subject. Adjuncts may be added to the subject, and the predicate allows both adjuncts and complements to the predicate verbs. Adjunct is used here as an optional element in a sentence. That is to say, it can be deleted from the sentence without affecting the other elements present in the construction (e.g. *se gɔtokal boi porchilo* 'He was reading a book yesterday' → *se boi porchilo* 'He was reading a book').

- (11) a. *mɔena porche*
 Moina reading
 'Moina is reading'
- b. *mɔena boi porche*
 Moina book reading
 'Moina is reading a book'

(11a) is composed of a noun and a finite verb, whereas, (11b) shows the second noun as the object of the verb. It should be mentioned here that sentences without a subject (e.g. boi porche 'is reading a book') cannot be constructed in Bengali except in the context of discourse. Sentences like (11a) and (11b) can be extended with adjective and adverb, as well as with determiners. The determiners always precede the noun in an NP. Adverbs occur before the verb and after the Subject NP. Attributive adjectives occur in a NP before the head noun. The PS rules generating the structures are given in (12).

- (12) i. $S \rightarrow NP \quad VP$
 ii. $VP \rightarrow (NP) \quad (Adv) \quad V$
 iii. $NP \rightarrow \left\{ \begin{array}{l} Pron \\ ((Det) \quad (Adj) \quad N) \end{array} \right\}$

Rule (11) can be illustrated with the following examples:

- (13) a. mou aste aste boi porche
 N Adv N V
 Mou slowly slowly book reading
 'Mou is reading book slowly'
- b. oi meeTa sundor posak poreche
 Det N Adj N V
 that girl-the beautiful dress wearing
 'That girl is wearing a beautiful dress'

1.2.3 Complements

When a complement occurs in a sentence, the underlying structure of a simple sentence is NP plus complement plus 'being' verb. The verb is obligatorily present in surface structure for all sentences marked for past or future tense and for all sentences (whatever the tense) that are marked as negative. For positive, present tense sentences, the verb is normally omitted in the case of a NP or adjective complement and is optional in the case of an adverb complement. The following examples are given to show the noun, adjective and adverbial complements in a simple sentence which is positive and marked for present tense.

(14) a. Noun Complement

tini Ø sikkhək
 he teacher
 'he (is a) teacher'

b. Adjective Complement

moutusi Ø sundori
 Moutusi pretty
 'Moutusi (is) pretty'

c. Adverbial Complement

i. se skule
 he school-in-the
 'He (is) in the school'

ii. se skule ache
 he school-in-the is
 'He is in the school'

The PS rules generating the complement structures are given in (15).

$$(15) \quad S \rightarrow \quad NP \quad Comp \quad \left\{ \begin{array}{ll} (V_{Be}) & Pres \\ V_{Be} & Past \\ V_{Be} & Fut \end{array} \right\}$$

$$Comp \rightarrow \left\{ \begin{array}{l} NP \\ Adj \\ Adv \end{array} \right\}$$

Such complement structures can be the source of relative clauses. As in the case of simple sentences, the verb in such clauses can be deleted if present tense and positive. This process may be observed in the following examples:

(16) Noun Complement

bhədrolok, [jini sikkhək], tini amader protibesi
 gentleman who teacher he our neighbour
 'The gentleman, who is a teacher, is our neighbour'

(17) Adjective Complement

mohua, [je sundori], se skuler chattri
 Mohua who pretty she school-of student
 'Mohua, who is pretty, is a student of the school'

(18) Adverbial Complement

meeta, [je bagane] , se amar bandhobi
 girl-the who garden-in-the she my friend
 'The girl, who is in the garden, is my friend'

In all the examples, the head nouns occur in initial position in the sentence and the complements occur after them in the embedded relative clauses that is shown in brackets. One interesting point should be mentioned here that in (16) and (17), no verbs are used either in the embedded or in the matrix sentences. The above examples show that the internal structure of the relative clause does not matter. The clause still modifies the head NP.

1.2.3.1 Complement to the Predicate Verb:

Predicate verbs also take complements, as in (19).

(19) cheleTa | osustho chilo
 boy-the sick was
 'The boy was sick'

osustho 'sick' occurs as the predicate adjective of the head noun cheleTa 'the boy' and functions as the complement to the predicate verb chilo 'was'. It should be mentioned here that the 'being' form of the verb occurs in (19). Normally in positive sentences the 'being' verbs do not occur in the simple present tense but they do occur in the past or future tense. The examples below show complements

to predicate verbs.

- (20) a. gæni lok | kókhono ɔhonkari hən na
 learned man never proud becomes not
 'A learned man never becomes proud'
- b. robindronather bɔlaka boiTa | ɔnarser paTT^h_o hoeche
 Rabindranath's Balak book-the Honours-in text
 became
 'Rabindranath's 'Balaka' has become a text in
 Honours class'
- c. saidur rəhoman | sikkhək somitir sɔbhapoti chilēn
 Saidur Rahman teachers association-of president was
 'Saidur Rahman was the president of the Teachers
 Association'

In the above examples, ɔhonkari 'proud', ɔnarser paTT^h_o 'text in Honours class' and sikkhək somitir sɔbhapoti 'president of the teachers association' occur as the complement to their respective predicate verbs which are shown at the end of the sentence. In (20c), somitir 'association's' is the genitive word and is used as modifier of sɔbhapoti 'president'. In (20b), ɔnarser paTT^h_o 'text in Honours class', ɔnarser 'in Honours class' is also a genitive word, and occurs as the modifier of paTT^h_o 'text'. Regarding the presence of the verb in (20a), it should be mentioned here that in negative sentences the verbs are always present and it is not possible to construct a negative sentence without any verb.

1.2.4 The place of the Verb in the Sentence

The verb is normally placed at the end of a sentence, though it can occur elsewhere (cf. 1.2.2). The following examples show the various possibilities for the position of the verb.

- (21) a. cheleTa boi porchilo
 boy-the book reading-was
 'The boy was reading a book'
- b. boi porchilo cheleTa
 book reading-was boy-the
- c.* porchilo boi cheleTa
 reading-was book boy-the

In (21a), the verb is at the end of the sentence, but is in medial position in (21b), where the subject has been moved to sentence-final position. That is, the verb porchilo 'reading' occurs, as usual, after the object in (21b). If the verb is placed before the object, the sentence becomes ungrammatical (21c). The sentences in (22) illustrate the occurrence of verbs in embedded sentences.

- (22) a. meeTa, je nacchilo, se kɔlejer chattri
 girl-the who dancing-was she college-of student
 'The girl, who was dancing, is a college student'
- á. nacchilo meeTa, je se kɔlejer chattri
 dancing-was girl-the who she college-of student

- b. meeTa, je soeTar bunchilo, se kōlejer
 girl-the who sweater knitting-was she college-of
 chattri
 student
 'The girl, who was knitting a sweater, is a college
 student'

- b.* bunchilo soeTar meeTa je se kōlejer
 knitting-was sweater girl-the who she college-of
 chattri
 student

In (22a), no object occurs in the embedded sentence [je nacchilo] 'who was dancing' and the shifting of the verb to initial position in (22a) is quite acceptable. (22b) is shown with the direct object in the embedded sentence [je soeTar bunchilo] 'Who was knitting a sweater' and shifting the verb to sentence-initial position is ungrammatical, as mentioned previously for (21c). This fact indicates that shifting any verb to the initial position is much easier in a objectless sentence or clause than in a sentence or clause with an object.

1.2.4.1 Transitive and Intransitive Verbs

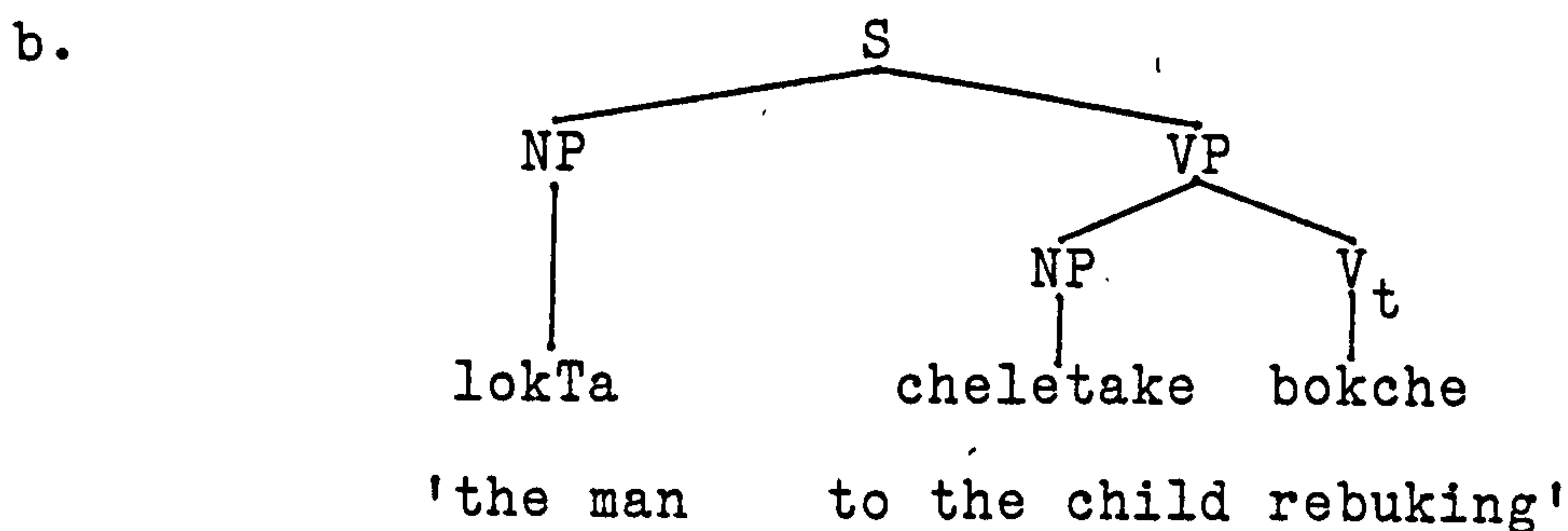
Bengali sentences allow both transitive and intransitive verbs. A transitive verb requires an object NP. cf. (23) (though this can be deleted with some verbs in certain cases).

- (23) a. lokTa cheleTake bokche
 man-the boy-the rebuking
 'The man is rebuking the child'
- b. lokTa caka ghorachchilo
 man-the wheel whirling
 'The man was whirling the wheel'
- c. anita rumike kamrechilo
 anita Rumi bite
 'Anita bit Rumi'

In the above examples, cheleTa 'the boy' (23a), caka 'wheel' (23b) and rumi 'Rumi' (23c) are the direct objects of the verbs bokche 'is rebuking' (23a), ghorachchilo 'is whirling' (23b) and kamrechilo 'bit' (23c) respectively. The environment of the occurrence of the transitive verbs can be shown in the following way (Brown and Miller, 1980: 51; Bowers, 1981: 80-81):

- (24) a. NP NP - #

The phrase structure rule of sentence (23a) can be shown in the following tree-diagram:



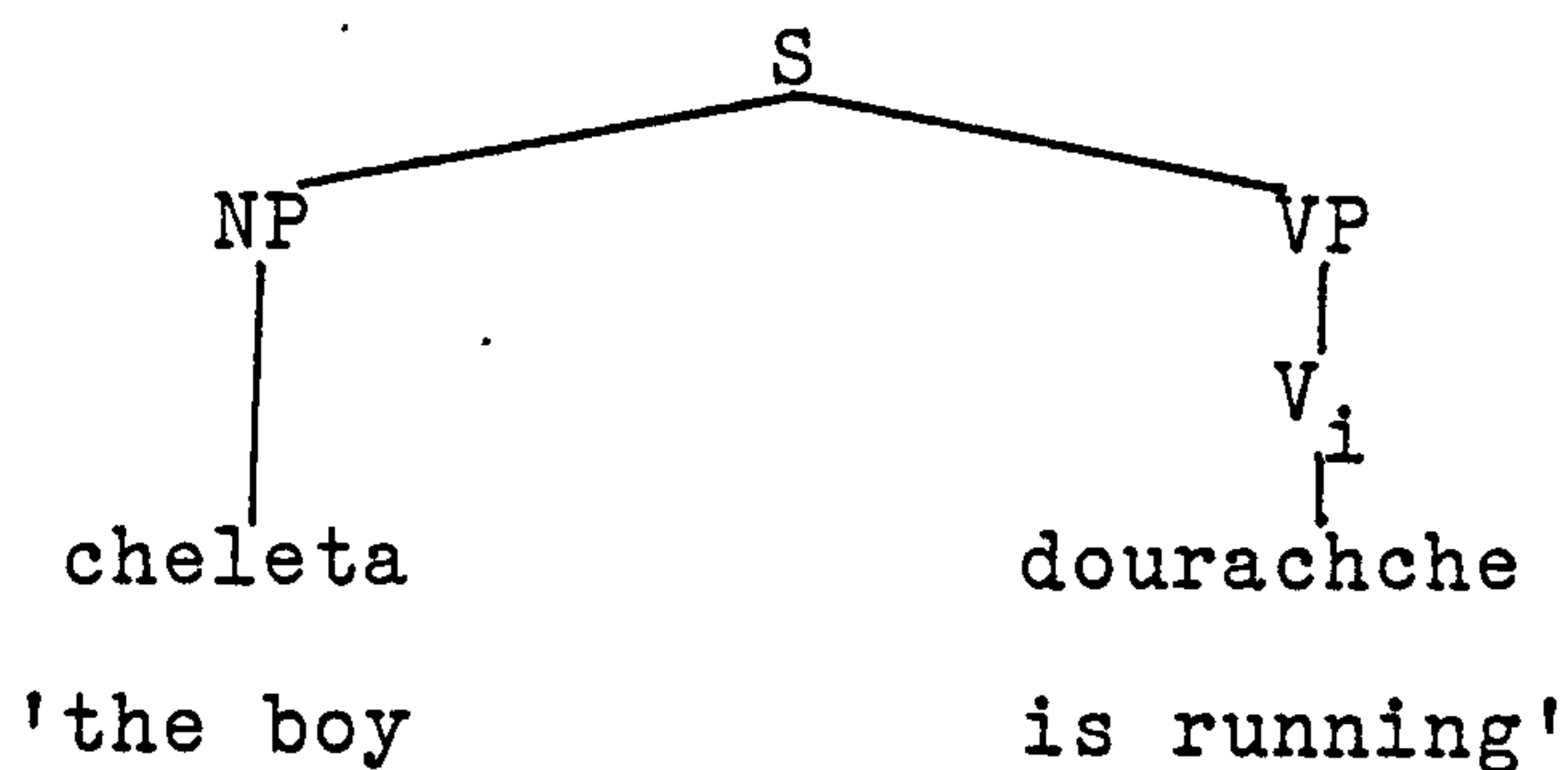
The following examples illustrate the use of intransitive verbs:

- (25) a. cheleTa dourachche
 boy-the running
 'The boy is running'
- b. meeTa kãdche
 girl-the crying
 'The girl is crying'
- c. surjo uTheche
 sun risen-has
 'The sun has risen'

In such of the above examples, the verb does not require any object NP to express its meaning. The simple structure of a sentence is the subject, which occurs as the head noun, and the finite verb in the predicate. As with transitive verbs, the environment of intransitive verbs can also be shown in the following way:

- (25) d. NP - #

The frame in (23d) corresponds to the tree-diagram in (25e).



1.2.4.2 Finite and Non-finite Verbs

Besides the transitive and intransitive distinction in verbs, a further distinction can be made between finite and non-finite verbs in Bengali. Bengali sentences can be constructed either with a finite verb alone or with a finite and a non-finite verb. Non-finite verbs cannot be used independently in sentences. The following examples illustrate the occurrence of finite and non-finite verbs.

(26) a. Finite Verb

mou sɔkale eseche

Mou morning-in come-has

'Mou has come in the morning'

b. Non-finite Verbs

i. mɔena Trene _gie ghumobe
 nf f
Moina train-in going sleep-will

'Moina will sleep in the train'

ii. mɔena ceare bose porche
 nf f
Moina chair-on sitting reading

'Moina is reading sitting on a chair'

Sentences remain incomplete without any finite verb, as illustrated in (26c):(cf.4.2.1)

(26) c.* mɔena Trene gie
 nf
Moina train-in going

d. mɔena Trene ghumbobe
 f
Moina train-in sleep-will

'Moina will sleep in the train'

1.2.4.3 Verbless Sentences

Some very common structures have no verb, as in
(25) (cf. 1.2.3).

(27) a. se bhalo mee

mou

She good girl

Mou

'She/Mou (is a) good girl'

b. jini sikkhok tini biddan. bekti

who teacher he learned man

'Who (is a) teacher (is a) learned man'

c. pinTu ækjon namkora khæ loar

Pintoo a famous player

'Pintoo (is a) famous player'

d. amar paser bhaddrolak eDinbora bissobiddalber

my side-of gentleman Edinburgh University's

bhasatotter oddhapok

Linguistics-of teacher

'The gentleman next to me (is a) teacher of

Linguistics at Edinburgh University'

If the examples in (27) contained a verb, it would be in the simple present tense, but the present tense form of the copula is optional. Ferguson (1972) has discussed the Bengali copula sentences in detail but has not explained the absence of the copula.

Even where no verb occurs in the surface structure

of a sentence, it can be assumed to be present in the deep structure, but has optional realisation in the surface structure. One relevant point is that it is only the present tense forms of the copula that fail to occur, never the past or future tense forms. The missing forms are shown in (28). One point should be mentioned here, that though the present tense forms of the copula has optional occurrence in positive sentences, this form of verb always occurs in sentences with negation.

(28) a. se amar bhai (hɔe)

he my brother is

'He (is) my brother'

á. se amar bhai hæ na

he my brother is not

'He is not my brother'

b. lokTar hate boi (ache)

man-of-the hand-in book has

'The man (has a) book in his hand'

ḅ. lokTar hate boi nei

man-of-the hand-in book is not

'The man does not have book in his hand'

c. ami bhalo (achi)

I well am

'I (am) well'

d. tini ghore (achen)

he room-in-the is

'He (is) in the room'

A further statement can be made on the occurrence and the structure of the negative elements in a sentence which are illustrated in (28á) and (28b). Though na 'not' occurs after the verb in a sentence as a negative constituent, the structure of a negative constituent may vary depending on the nature of the complements in a sentence. Apart from the regular use of a negative element na, it may take the forms of either nəe or nei 'is not'. The following PS rule can be formulated on the occurrences of negative elements in complement sentences.

$$(29) \quad S \rightarrow NP \quad Comp \quad V_{Be} \quad Neg$$

$$Comp \rightarrow \left\{ \begin{array}{l} NP \\ Adj \\ Adv \end{array} \right\}$$

A morphophonemic rule is needed to handle the occurrence of different types of negative elements in a sentence. This is illustrated in (29').

(29') Morphophonemic Rules

- a. $V_{Be} + Pres + Neg \rightarrow [həe] [\bar{n}a] \rightarrow h.jena / NP --$
- b. $V_{Be} + Pres + Neg \rightarrow [həe] [na] \rightarrow nəe / Adj --$
- c. $V_{Be} + Pres + Neg \rightarrow [ache] [na] \rightarrow nei / Adv --$

(29') shows three variable patterns of negative constituents after verbs which are illustrated in (30)

- (30) a. selina amar bandhobi h.jena
Selina my friend is not

'Selina is not my friend'

b. selina bhalo nœ

Selina good is not

'Selina is not good'

c. cheleTa ghœre nei

boy-the room-in-the is not

'The boy is not in the room'

The following statement can be made on the non-occurrence and occurrence of verb 'being' in present tense. The examples that are given in (28) show the optionality of a 'being' verb in positive sentences and its obligatory occurrence in negative sentences in present tense forms (28 a, b). The interesting point is that when different forms of 'being' occur in sentences, they do not have the same privileges of occurrence in a sentence. Among the different forms 'being' hœ (hœn: honorific) and ache 'has/have' can occur either in sentence-final or after any noun or pronoun in a sentence. On the other hand, hochche 'is' occurs only after the subject noun or pronoun and never in sentence-final position. The following examples illustrate this.

(31) a. eTa hochche æ kTa jama (*hochche)

it is a shirt is

'It is a shirt'

b. o hochche amar bondhu (*hochche)

he/she is my friend is

'He/she is my friend'

- c. amar bondhu hochche æ kjon Daktar (*hochche)
 my friend is a doctor is
 'My friend is a doctor'

- 32 a. tini hɔn amar bhai (hɔn)
 he is my brother is
 'He is my brother'

- b. lokTar ache æ kTa boi (ache)
 man-of-the has a book has
 'The man has a book'

In the above examples, the distribution of hochche 'is' shown after the subject. (31) and (32) show the optional occurrences of hɔn 'is' and ache 'has/have' either after the subject or in sentence-final positions. When the verbs hɔn and ache occur in sentence-final positions (32), they show the usual pattern of a Bengali sentence. When the above verbs occur after the subject, they show the literary usage in a Bengali sentence. The contrast between (31) and (32) is that all the sentences in (31) show the SVO sentence pattern, whereas (32) show the SOV pattern of sentences. Both types of sentence are common in Bengali. It should also be mentioned here that like the verbs in (32), the verbs in (31) cannot optionally occur elsewhere, i.e. they must occur after the subject noun and never in sentence-final positions.

Another fact supporting the view that the copula is present in the deep structure is that it appears in

questions and answers, as in (33).

(33) a. tumi kæ mon acho?

you how are

'How are you?'

á. ami bhalo achi

I well am

'I am well'

Note that the copula sentences have the SOV pattern.

1.2.5 Adjective and Adverb

(34) a. cheleTa taratari hãtche (Adv+V)

boy-the fast walking

'The boy is walking fast'

b. sada paeraTa akase urche (Adj+V)

white pigeon-the sky-in flying

'The white pigeon is flying in the sky'

c. calak lokTa amader protibesi (Adj+V)

clever man-the our neighbour

'The clever man (is) our neighbour'

The occurrence of adverb is shown in (34a), where it is placed after the noun and before the verb. (34b) is shown with the verb, whereas no verb is used in (34c). Attributive adjectives usually occur before the noun. Both in (34b) and (34c), attributive adjectives are shown in sentence-

initial position. Adjectives may also be used predicatively. The occurrence of predicative adjective is shown in (34d). (See also 1.2.3).

- (34) d. meeTa dekhte mondo nɔe
 girl-the look-to bad not
 'The girl does not look bad'

It should be mentioned here that usually no adverbs can occur in verbless sentences. On the other hand, adjectives may be used either in verbal or non-verbal sentences, cf.(35).

1.2.5.1 Adjectives in Non-verbal Sentences

- (35) a. cheleTa æ kebare boka
 boy-the congenital fool
 'The boy is a congenital fool'
- b. cheleTar kɔpal mondo
 boy-of-the destiny bad
 'The boy is unlucky'
- c. meeTa bes sundori
 girl-the quite pretty
 'The girl is quite pretty'
- d. tomar bandhobi bes sundori
 your girl-friend quite pretty
 'Your girl-friend is quite pretty'
- e. amader ɔŋker sikkhɔk ottonto bɔdragi
 our mathematics-of teacher very ill-tempered
 'Our mathematics teacher is very ill-tempered'

Adverbs can occur in the verbless sentences as modifiers of adjectives as shown in (35a) and (35d). However, such adverbs cannot occur without adjectives in the verbless sentences. Cf.(36)

- (36) a.* se taratari
 he fast
- b.* cheleTa aste
 boy-the slowly
- c.* cheleTa æ kebara
 boy-the completely

1.2.6 Quantifiers, Determiners and Particles

Quantifiers

- (37) a. tinjon chele maThe bəl khelche
 three boy field-in ball playing
 'Three boys are playing with the ball in the field'

Determiner

- (37) b. ei cheleTa aj bəl khelbe
 this boy-the to-day ball play will
 'This boy will play ball to-day'
- c. cheleTa boi porche
 boy-the book reading
 'The boy is reading a book'

d. English: A man came

Bengali: æ kTa/æ kjon manus esechilo

a one (person) man came

'A (one) man came'

Quantifiers and determiners are occasionally used before the noun either in sentence-initial position or elsewhere in the sentence. Determiners having the form of the particles are suffixed to nouns. Where English has an indefinite article, Bengali has a quantifier. Corresponding to the definite article 'the' is the particle -Ta.

1.2.7 Number and Person concord in Bengali

Nouns and pronouns show grammatical concord with verbs in Number and Person. The following examples are given to show the singular and plural forms of nouns and pronouns.

1.2.7.1 Number

a. Nouns

bon -- bonra 'sister — sisters'

manus -- manusra (-gulo) 'man — men'

boi -- boigulo (* -ra) 'book — books'

bagh -- baghgulo 'tiger — tigers'

b. Pronouns

ami -- amra 'I - we'

se -- tara 'he/she - they'

amar -- amader 'my - ours'

-ra is used as a plural marker only for human nouns and is not ordinarily used for any animate or inanimate nouns. No plural markers are added with any nouns such as pani 'water', tel 'oil', etc. to show its plurality. However, a plural marker is sometimes used for nouns such as bali 'sand' (baligulo), maTi 'earth' (maTigulo), etc. The marking of plural suffixes shows that ordinarily the plural markers are added with count nouns and when mass nouns like bali and maTi are used as count nouns they allow suffixes with them.

1.2.7.2 Person

The grammatical category of person has three variations in second person (honorific, nonhonorific and common) and two variations for third person (honorific and common):

(38) a. First Person

Singular	Plural	
ami	amra	'I - we'

b. Second Person

tumi	tomra	(neutral)'you - you'
tui	tora	(non-honorific)'you - you'

apni apnara (honorific) 'you - you'

c. Third Person

se tara (neutral) 'he/she - they'

tini t̃āra (honorific) 'he/she - they'

The honorific, non-honorific and common forms for second and third person are based on social and individual criteria. The different forms in person change the verbal endings. These are shown in the following examples:

(39) a. tumi asbe (common)

you come-will

'You will come'

b. tui asbi (non-honorific)

you come-will

'You will come'

c. apni asben (honorific)

you come-will

'You will come'

With full nouns as subject, as opposed to pronouns, the verb endings reflect the contrast between honorific, common, and non-honorific.

There are four genders of noun, but gender does not affect the choice of verb inflection. In noun morphology, the feminine gender is distinguished from the masculine by the addition of feminine suffixes (40a.i) or separate morphemes (40a.ii); but verbal or personal forms are not

- iii. cheleTa/meeTa ghumuchche
 chelegulo/meegulo
 boy-the/girl-the sleeping
 boys/girls
 'The boy/girl is sleeping'
 boys/girls are

1.2.8 Focusing

Focusing of any element in a sentence is possible after signalling the constituent by an intonation to give the new information which is the main part of the speaker's communicative interest. Focusing can be performed in Bengali in two ways: either by the use of stress, or by the operation of a movement rule. Example (41) illustrates the first of these processes:

- (41) a. m`ohua kəpale Tip dieche
 Mohua forehead-on finger-mark given-has
 'Mohua has given finger-mark on her forehead'
- b. mohua kəpale Tip dieche
 forehead-on
- c. mohua kəpale T`ip dieche
 finger-mark

The shifting of focus from one word to another changed the meaning of the sentences in (41):

- (41) a. Only Mohua has given finger-mark on her forehead
(and nobody else);
- b. Mohua has given finger-mark only on her forehead
(and in no other place);
- c. Mohua has given only finger-mark on her forehead
(and nothing else).

Focusing is relevant to cleft and pseudo-cleft constructions (see Chapter 7). Example (41) is taken up again here to show the cleft formation in Bengali.

- (42) a. eTa mōhua je kṓpale Tip dieche
it Mohua who forehead-on finger-mark given-has
'It is Mohua who has given finger-mark on her forehead'
- b. eTa Tip ja mohua kṓpale dieche
it finger-mark what Mohua forehead-on given-has
'It is finger-mark that Mohua has given on her forehead'
- c. eTa kṓpal Jekhane mohua Tip dieche
it forehead where Mohua finger-mark given-has
'it is on the forehead that Mohua has given finger-mark'

In (42), mohua 'Mohua', Tip 'finger-mark' and kṓpal 'forehead' occur as the focused nouns in cleft constructions. Note the occurrence in (42c) of jekhane 'where' without a regular relative marker like (42a) and (42b).

1.3 The Present Study

1.3.1 Theoretical Background

Relativization is a process whereby a sentence is embedded as a modifier in a noun phrase. In recent transformational studies, relativization has been investigated from various standpoints, and a short description is given here of the different approaches.

There are three different views regarding the deep structure of a relative clause. According to Lees (1963), Smith (1964), Chomsky (1965), Jacobs and Rosebaum (1968), Langendoen (1969) and others, relativization is a process whereby a sentence is embedded into a noun phrase. They follow the principle that relative clauses are embedded in a complex structure. Linguists like Thompson (1968, 1971), Drubig (1968) believe that the underlying structure for a relative clause is a conjunction in a complex sentence. A third view is maintained by Lakoff (1965), Ross (1967), Back (1968), Aissen (1972) and Schachter (1973), who believe that a relative clause shows both embedding and conjunction in its deep structure. This analysis shows embedding for the restrictive relative clause and conjunction source for the non-restrictive relative clause. The first view has been accepted in the present work, as relativization in Bengali involves either deep or partial embedding. The Bengali sentences clearly show the embedding of a sentence in a noun phrase. When a relative clause is constituted in

a complex sentence, the relative clause shows the embedding in the matrix sentence. The way a sentence is embedded in an NP is shown in the following example:

- (43) a. [cheleTa boi porche] [cheleTa amar bondhu]
 boy-the book reading boy-the my friend
 'The boy is reading a book' 'The boy is my friend'
- b. cheleTa [cheleTa boi porche] amar bondhu
 boy-the boy-the book reading my friend
- c. cheleTa [cheleTa amar bondhu] boi porche
 boy-the boy-the my friend book reading
- d. cheleTa, [je boi porche], se amar bondhu
 boy-the who book reading he my friend
 'The boy who is reading a book is my friend'
- e. cheleTa, [je amar bondhu], se boi porche
 boy-the who my friend he book reading
 'The boy, who is my friend, is reading a book'

(43) shows that either the first or the second sentence can embed the other. (43d) shows that [je boi porche] 'who is reading a book' is embedded in the sentence [cheleTa amar bondhu] 'The boy is my friend'. On the other hand, the other possibility of embedding is shown in (43e), where [je amar bondhu] 'Who is my friend' is embedded in [cheleTa boi porche] 'The boy is reading a book'. This process of embedding shows that when the antecedent occurs before the relative clause and is separated by a comma in surface structure, it shows the embedding of the relative clause in the noun phrase (see 2.1.11).

1.3.2 Transformational Derivation of Relative Clauses

The transformational derivation of relative clauses has also been studied from different perspectives. A short description of transformational derivations is given below from recent studies on relativization.

Three different transformational analyses of relative clauses are available in the present literature of linguistics. These are the Matching Analysis, Promotion Analysis and Deep Structure Conjunction Analysis. These are discussed briefly in the following section.

1.3.2.1 The Matching Analysis

Schachter (1973) has proposed the Matching Analysis, which has simple application in studying relativization. According to this analysis, the coreferentiality condition is established between two NPs that occur in matrix and embedded sentences. The NP in the matrix sentence has the surface realization as the antecedent of the relative clause and the NP of the embedded sentence shows the surface realization of the relative pronoun that occurs within. The following example is given to show the application of the Matching Analysis:

(44) a. That is the girl who borrowed my book

b. ${}_s[\text{That is the girl } {}_s[\text{the girl borrowed my book}]_s]_s$

Sentence (46a) is presumed to derive from sentences (44b), and shows the process of relativization after applying the

Matching Analysis. (44b) shows that the NP (the girl) in the embedded sentence is coreferential with the NP (the girl) in the matrix sentence. The Matching Analysis clearly indicates that the relative clause construction is a process whereby the relative clause is derived after deleting the repeated noun for the relative pronoun that modify the clause. Following Vergnaud (1974:6), it can be said that in Matching Analysis the third term is deleted in sentence (44):

(45) ¹
 the girl - ²
 wh - ³
 the girl - borrowed my
 book

The third term (the repeated NP in the embedded sentence) the girl which is an NP in the embedded sentence is deleted for the relative pronoun (wh), which is coreferential with the NP (the girl) in the matrix sentence. The NP (the girl) in the matrix sentence occurs as the head noun of the sentence. In this process, the repeated NP is deleted to constitute the relative clause.

The Matching Analysis is simple in its formation though it is not applicable to the favoured relativization strategy in Bengali, because of its correlative structure. The Matching Analysis explains the repeated NP in the relative clause, but not the correlative pronoun that occurs in the matrix sentence. There is no matching in the syntactic description of the Bengali relative clauses, though Je-se 'who -he' elements have to be related by a rule of semantic interpretation. English sentences like 'The boy

that I met is my brother' correspond to a Bengali structure of the kind 'The boy that I met he is my brother'. The latter construction with he correlative in Bengali shows that the Matching Analysis is not suitable for application to Bengali in all cases. In Bengali, the antecedent is retained either in the matrix sentence or in the embedded sentence, depending on the structure of complex sentence. When the antecedent is retained in the embedded sentence, the coreferential pronoun occurs in the empty slot of the matrix sentence. Even when the antecedent occurs initially in the matrix sentence, the coreferential pronoun is also retained in the later part of the matrix sentence. The reason for this kind of structure for the Bengali sentence is that the relative pronoun is more usually used with some coreferential elements like je-se 'who-he', ja-ta 'what-that', etc. Similar patterns occur not involving relative pronouns, e.g. jbe - tbe 'if - then', jkhon - tkhon 'when-then'. The following example is given to show the non-application of the Matching Analysis for Bengali relative clauses.

- (46) a. je cheleTa khelche, se amar bondhu
 who boy-the playing he my friend
 'Who the boy is playing is my friend'
- b. cheleTa, je khelche, se amar bondhu
 boy-the who playing he my friend
 'The boy, who is playing, is my friend'

The relative pronoun occurs before the postcedent in (46a),

and the coreferential pronoun for the NP occurs in the matrix sentence. In (46b), the antecedent is retained in the matrix sentence with the coreferential pronoun. This process can be observed more precisely in (47):

- (47) a. [cheleTa khelche] [cheleTa amar bondhu]
 boy-the playing boy-the my friend
- b. [je cheleTa khelche] [se cheleTa amar bondhu]
 who boy-the playing he boy-the my friend
- c. [je cheleTa khelche] [se \emptyset amar bondhu]
 who boy-the playing he my friend
 'Who the boy is playing (he) is my friend'
 ['The boy who is playing is my friend']
- (48) a. [cheleTa khelche] [cheleTa amar bondhu]
 boy-the playing boy-the my friend
- b. cheleTa [cheleTa khelche] amar bondhu
 boy-the boy-the playing my friend
- c. cheleTa, [je khelche], se amar bondhu
 boy-the who playing he my friend
 'The boy, who is playing, is my friend'

The above examples show that the Matching Analysis is not totally applicable to Bengali due to its correlative construction. However, there is another type of relative clause in Bengali where the correlative does not occur. The Matching Analysis is applicable to this type of relative clauses in Bengali as illustrated in (49).

(49) a. [amar æ kta boi ache] [æ kta boi ammu amake
 my a book have a book mother me
 kine dieche]
 bought-has

b. amar æ kta boi ache, ja ammu amake kine
 my a book have which mother me bought
 dieche
 has

'I have a book which my mother has bought for me'

The repeated NP (boi 'book') is replaced in the embedded sentence by the relative pronoun ja 'which' in (49), which clearly allows the Matching Analysis. It should be mentioned here that sentences like (49) show that when no coreferential pronoun occurs in the matrix sentence in Bengali it stands before the relative clause. A few more examples are give to show the applicability of the Matching Analysis for one type of Bengali relative clause.

(50) a. bhōddroloker æ kTa bari chilo ja jhore
 gentleman-of a house had which storm-in
 bheṇe gæ che
 blown down has

'The gentleman had a house which was blown down
 in a storm'

b. monjular abbar æ kTa aṇṭi ache ja hire
 Manzula's father-of a ring has which diamond
 die toiri
 with made

'Manzula's father has a ring which is made of diamond'

c. hasnat saheb mara gæ chen, jini bissobiddalæ

Hasnat Saheb died has who University-to

itihās p̄ratan

history taught

'Mr Hasnat has died who used to teach history to the University'

1.3.2.2 The Promotion Analysis

Schachter (1973) also proposes the Promotion Analysis and argues that this analysis is better than the Matching Analysis. Promotion Analysis is a transformational process where the constituent of an embedded sentence in relative clause replaces a dummy symbol in the matrix sentence. To put it in another way, this analysis allows the promotion of a constituent from an embedded sentence into the matrix sentence. The following example is given to show the process of Promotion Analysis (example from Schachter).

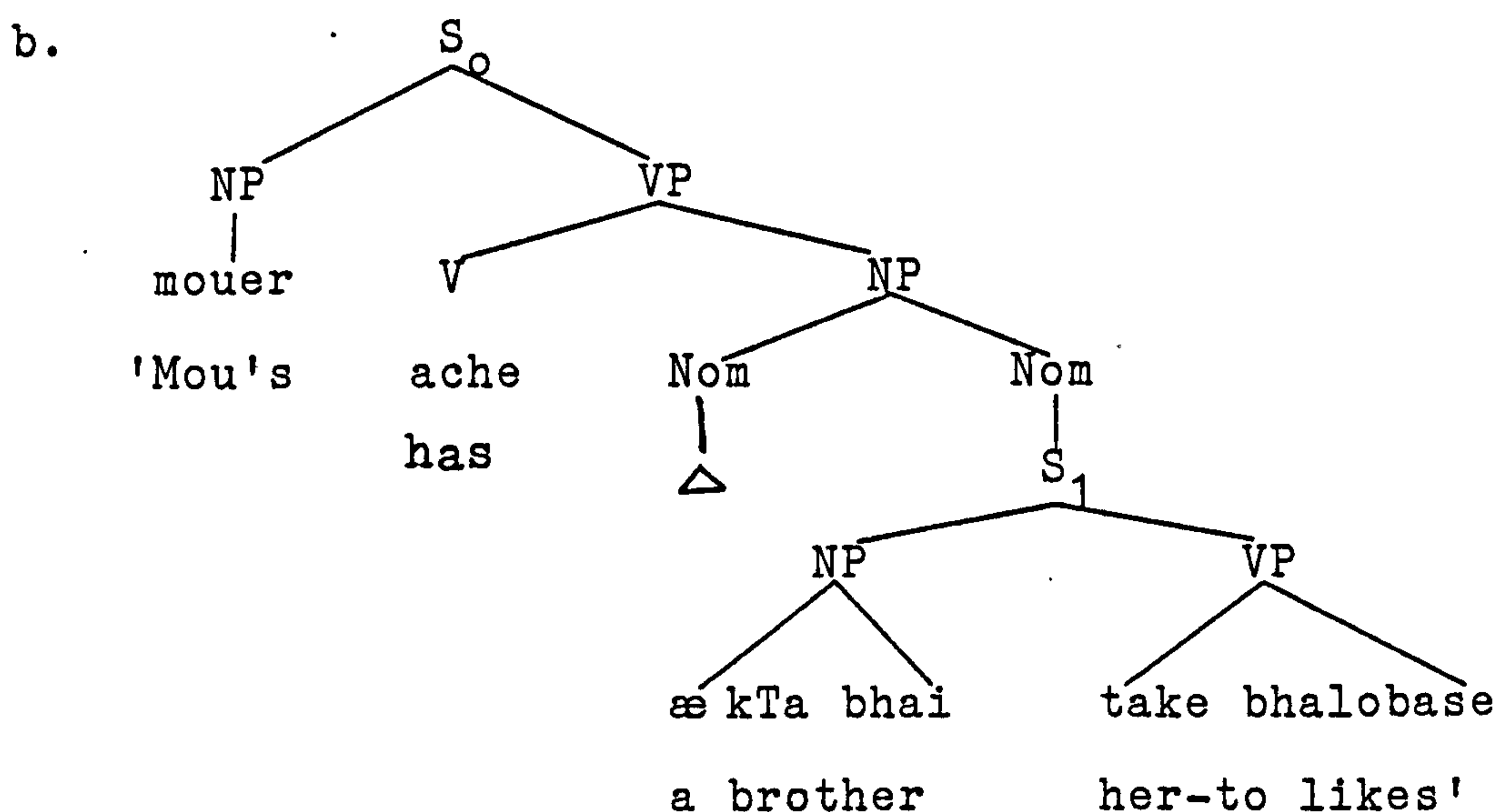
(51) a. These are the times that try men's souls

b. _s[these are the times _s[the times try men's souls]

According to this analysis, the antecedent of the relative clause that occurs before the embedded sentence is generated as a constituent of the embedded sentence. The constituent

of the embedded sentence which is deleted from the relative clause is promoted to the NP position in the matrix sentence as the antecedent of the relative clause to fill the empty position. The following example shows the promotion of the NP that occurs in the embedded sentence of the relative clause.

- (52) a. mouer æ kTa bhai ache je take bhalobase
 Mou's a brother has who her-to loves
 'Mou has a brother who loves her'



It is assumed that sentence (52a) is derived from the underlying structure shown in (52b). (52a) shows the promotion of the NP æ kTa bhai 'a brother' to the matrix sentence to fill the empty slot of the Nom, dominated by NP. The result is the relativization of the lower node of S_0 , which is shown as S_1 .

The Bengali relative clause can be derived via the Promotion Analysis. There are three possible ways of applying the Promotion Analysis for Bengali relative clauses.

First, it is applicable when the relative pronoun occurs before the postcedent; second, if the coreferential pronoun is used before the embedded sentence; and third, if any noun occurs as the antecedent before the embedded clause. The above possibilities are exemplified in the following:

- (53) a. [cheleTa amar bondhu][cheleTa boi porche]
 boy-the my friend boy-the book reading
 'The boy is my friend' 'The boy is reading a book'
- b. cheleTa, [je amar bondhu], se boi porche
 boy-the who my friend he book reading
 'The boy, who is my friend, is reading a book'
- (54) *se cheleTa [je amar bondhu] boi porche
 he boy-the who my friend book reading
 'He the boy who is my friend is reading a book'
- (55) mou, [je amar bondhu], se boi porche
 Mou who my friend she book reading
 'Mou, who is my friend, is reading a book'

(53) and (55) show what is essentially identical structure in relativization. The only difference is that the common noun occurs as the antecedent in (53b), whereas, the proper noun has taken its place in (55). (54) shows contrast with (53) and (55), as the coreferential pronoun occurs before the antecedent in the matrix sentence in (54). Sentences like (54) are not acceptable in Bengali. Moreover, (54) shows substitution of se 'he' for a full NP which is not very plausible in case of applying the Promotion Analysis

as the coreferential pronoun can be handled with the rule of relative correlative interpretation which is already mentioned in the Matching Analysis (see p.44). Sentences like (54) shows that it cannot be handled with the Promotion Analysis. Moreover, if the relative pronoun occurs before the head noun as in the deictic relative clause [je cheleTa amar bondhu, se boi porche] 'Who the boy is my friend (he) is reading a book', then the Promotion Analysis shows the reverse system of promoting the antecedent of the matrix sentence in the embedded sentence. From this it follows that, the Promotion Analysis is applicable only for the sentence which allows the antecedent before the embedded sentence in surface structure. However, there is another way to solve the problem by promoting the antecedent of the matrix sentence, for the sentences which allow the retention of relative pronoun before the antecedent. In this case, the antecedent is retained in the embedded sentence. This process does not seem very effective for Bengali and it can be regarded as not applicable to correlative analysis. Though the correlative approach is not totally applicable here, it can be compared with the Promotion Analysis. The following example is given to show the possibility of the Promotion Analysis for Bengali relative clauses where the antecedent is retained in the embedded sentence and the empty slot is retained in the matrix sentence without promoting the antecedent from the embedded sentence.

- (56) a. [cheleTa amar bondhu] [cheleTa boi porche]
 boy-the my friend boy-the book reading

- b. [je cheleTa am^ar bondhu] [se cheleTa boi porche]
 who boy-the my friend he boy-the book reading
- c. [je cheleTa amar bondhu] [se Ø boi porche]
 who boy-the my friend he book reading
 'Who the boy is my friend (he) is reading a book'

Except for ['The boy who is my friend is reading a book'] the sentences where relative pronouns occur before antecedents, in all other cases (where antecedents occur before relative pronouns) the Promotion Analysis works perfectly. The Promotion of the ant^ecedent from the matrix to the embedded sentence can also be described in a different way for Bengali sentences which allow the retention of the antecedent in the embedded sentence. The simple rule is that if je 'who' occurs before the antecedent, then the antecedent is retained in the embedded sentence. It shows that the antecedent can be retained either in the matrix or in the embedded sentence depending^{on} the structure of the relative clause. This analysis solves the problem of retaining the antecedent in the embedded clause. A few more examples are given below to show the easy formulation of the Promotion Analysis.

(57) a. [amar ækjon bondhu ache]

my a friend have

[amar bondhu amake bhalobase]

my friend me loves

b. [amar ækjon Δ ache] [amar bondhu amake bhalobase]

my a have my friend me loves



- c. [amar æ kjon bondhu ache, je amake bhalobase
 my a friend have who me loves
 'I have a friend who loves me']

(58) a. [mou boi porche] [mou skule jabe]
 Mou book reading Mou school-to go-will

b. [Δ boi porche] [mou skule jabe]
 book reading Mou school-to go-will

c. mou boi porche je skule jabe
 Mou book reading who school-to go-will
 'Mou is reading a book who will go to school'
 ['Mou, who will go to school, is reading a book']

(59) a. [bhəddrolok bose achen] [bhəddrlok amar āttio]
 gentleman sitting is gentleman my relative

b. [Δ bose achen] [bhəddrolok amar āttio]
 sitting is gentleman my relative

c. bhəddrlok bose achen jini amar āttio
 gentleman sitting is who my relative
 'The gentleman is sitting who is my relative'

In all these examples, the application of Promotion Analysis can be observed where the antecedent (shown underlined) is retained in the matrix sentence. The sentences also show that coreferential pronouns do not occur in the matrix sentences either. (57) and (58) do not impose any restriction as the subject of the sentence and the head noun are different. The object of the main verb occurs as the antecedent of the relative clause. However, sentences like (58)

and (59) become more acceptable with the following structures:

(58) mou,[je skule jabe], se boi porche
 Mou who school-to go-will she book reading
 'Mou, who will go to school, is reading a book'
 or.

je mou skule jabe, se boi porche
 'Who Mou will go to school is reading a book'

(59) bhaddrollok, jini amar attio. tini bose achen
 gentleman who my relative he sitting is
 'The gentleman, who is my relative, is sitting'
 or.

je bhaddrollok amar attio, tini bose achen
 'Who the gentleman is my relative is sitting'

Sentences like (58) and (59) show that the Promotion Analysis is not completely acceptable in analysing the Bengali relative clause due to its correlative structure. The examples which are given in (57-59) clearly show that the Promotion Analysis is applicable to only one type of relative clauses which does not include the correlative in the matrix sentences. These types of sentence can be analysed in terms of the Matching Analysis, which has been described in the previous section.

1.3.2.3 Underlying Structure Conjunction Analysis

Thompson (1968, 1971), Bach (1968) and Stockwell et al (1973) have proposed a third type of transformation for the relative clause known as the Underlying Structure Conjunction Analysis. According to this proposal, the relative clause has conjunction source in the deep structure. This analysis is more or less abstract in nature and is based on logical structure. The following example is given to show the Underlying Structure Conjunction Analysis.

- (60) a. amar æ kjon bon ache, je amake bhalobase
 my a sister have who me loves
 'I have a sister who loves me'
- b. sekhane æ kTa eks ache jæ mon ta eks hochche
 there an X is such that X is
 æ kjon bon amar eks ache ebonj eks amake
 a sister my X have and X me
 bhalobase
 loves
 'There exists an X such that (X is a sister)
 (I have an X) and (X loves me)

According to this formulation, (60a) is derived from (60b) and (60b) shows the conjunction source for (60a) with its logical structure.

The Underlying Structure Conjunction Analysis has not been followed in the present dissertation as the Matching and Promotion Analyses are more easily applied.

Moreover, the Bengali relative clause formulation rule shows the matching of the relative pronoun and the promotion of the antecedent to the matrix sentence (or in the embedded sentences for certain types of relative clauses). From this perspective, Schachter's Matching and Promotion analyses have a readier (though restricted) application to Bengali relative clauses than the Underlying Structure Conjunction Analysis.

1.3.2.4 Correlative Structure Analysis

The three different analyses of relative clauses show that individually they cannot handle properly the structure of Bengali relative clauses. The Matching, Promotion and the Underlying Structure Conjunction analyses have limited application to Bengali relative clauses as they can handle only the matching of the relative pronoun and the promotion of the antecedent to the matrix sentence, but not the correlative structure in Bengali. From this perspective, Bengali relative clauses need an analysis which can handle both the relative pronoun and the correlative.

Bengali relative clauses show seven different structures with or without an antecedent which can be described in the following way: (a) the antecedent within the relative clause (can be considered as a deictic relative clause); (b) without any head noun (headless relative clause); (c) the head noun in the matrix sentence; (d) head

noun in the relative clause occurring after the matrix sentence; (e) head noun in the matrix sentence occurring before the relative clause; (f) head noun before the relative clause (true relative clause) and (g) no co-referential pronoun occurring in the matrix sentence. Except (g), all other relative clauses show the occurrence of the relative pronoun and the correlative element. The above structures of Bengali relative clauses can be handled with its relative and correlative structures along with (g) which lacks the correlative. The seven different structures of Bengali relative clauses that are outlined can be shown in the following examples.

(61) a. je cheleTa amar bondhu, se esechilo

who boy-the my friend he came

'Who the boy is my friend came'

['The boy who is my friend came']

b. je amar bondhu, se esechilo

who my friend he came

'Who is my friend came'

c. je amar bondhu, se cheleTa esechilo

who my friend he boy-the came

'The boy came who is my friend'

d. se esechilo, je cheleTa amar bondhu

he came who boy-the my friend

'He came the boy who is my friend'

e. se cheleTa amar bondhu, je esechilo

he boy-the my friend who came

'He the boy is my friend who came' (lit)

f. cheleTa, je amar bondhu, se esechilo

boy-the who my friend he came

'The boy, who is my friend, came'

g. amar æ kTa boi ache, ja ammu kine dieche

my a book have which mother bought has

'I have a book which my mother bought for me'

The above sentences show a wide range of structures of relative clauses and seven rules are needed to handle the complex structures of Bengali relative clauses; these may be formulated in the following way.

(62) a. X, je Y, se Z

cheleTa, je amar bondhu, se esechilo

'The boy, who is my friend, came'

True relative clause: antecedent occurs before the relative clause (NP + S)

b. je X Y , se Z

je cheleTa amar bondhu, se esechilo

'Who the boy is my friend came'

deictic relative clause: head noun occurs inside the relative clause (je + NP)

c. je Y , se Z

je amar bondhu, se esechilo

'Who is my friend came'

headless relative clause

d. je Y, se X Z

je amar bondhu, se cheleTa esechilo

'The boy came who is my friend'

head noun occurs in the matrix sentence

e. se Z, $\left\{ \begin{array}{l} \text{je X Y} \\ \text{X, je Y} \end{array} \right\}$

(i) se esechilo, je cheleTa amar bondhu

'He came the boy who is my friend'

(ii) se esechilo, cheleTa, je amar bondhu

'He came the boy who is my friend'

(i) deictic relative clause: occurring after
the matrix sentence;

(ii) true relative clause: occurring after the
matrix sentence.

f. se X Z, je Y

se cheleTa amar bondhu, je esechilo

'The boy who came is my friend'

head noun in the matrix sentence: occurring
before the relative clause

g. X Z, je/ja Y

amar ækTa boi ache, ja ammu kine dieche

'I have a book which my mother bought for me'

Relative construction: without any correlative
in the matrix sentence

X = NP

These examples of the Bengali relative clause
show it has a structure like NP[je + clause][se + matrix S]

which shows je 'who' insertion in the relative clause and se 'he' insertion in the matrix sentence. When je 'who' replaces the identical noun phrase in the relative clause, then the occurrence of se 'he' correlative automatically follows the relative clause and occurs before the matrix sentence. A rule of semantic interpretation is needed to handle the reference of the correlative pronoun. The semantic rule interprets that a Bengali relative clause must have a construction like je-se 'who-he' or ja-ta 'what-that', without which the sentence is not correct. The relative and the correlative pronouns in Bengali show the mutual relation of two items which are regularly used together as a co-member in complex sentences. The correlatives imply a positive relationship in complex sentence which can be said to be more than the identity of function (Matthews, 1981:221). Moreover, in analysing the relative correlative structure in Bengali, the reference can be determined by a rule of semantic interpretation; so that the deep structure of a complex sentence containing a relative pronoun and a correlative marker can contain both the elements without making any recursion.

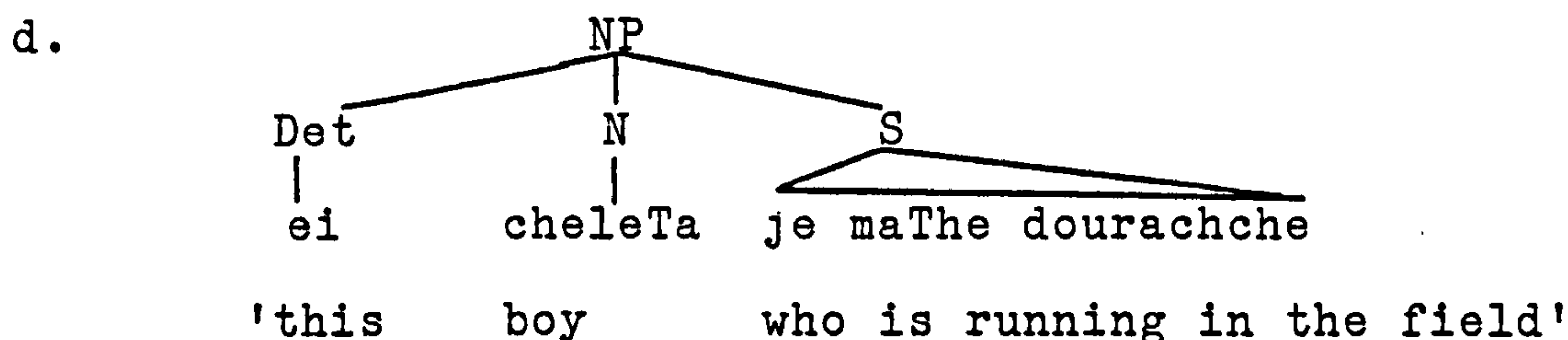
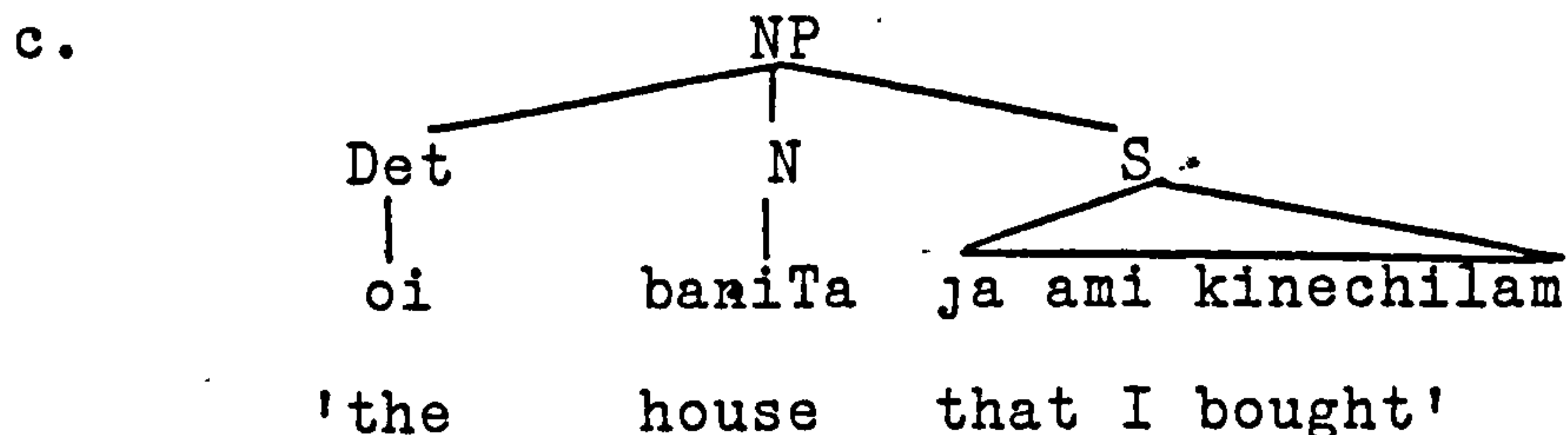
It is clear from this discussion that Bengali relative clauses require a separate rule for the interpretation of the relative clause and its coreferential element that occurs in the matrix sentence. The present Correlative Structure Analysis is capable of handling the problem with semantic interpretation of the correlative pronoun in Bengali.

1.3.3 Surface Structure of Relative Clauses

It is clear from the above discussion that Bengali relative clauses are generated by the embedding of a modifying sentence inside the noun phrase and by having the entire relative clause followed by a correlative sequence. It also shows the embedding of the relative clause in the noun phrase. The structural description of a relative clause can be presented from different standpoints. The surface realization of a relative clause has been described by different linguists from different perspectives. A short description is given here of the surface structure of relative clauses.

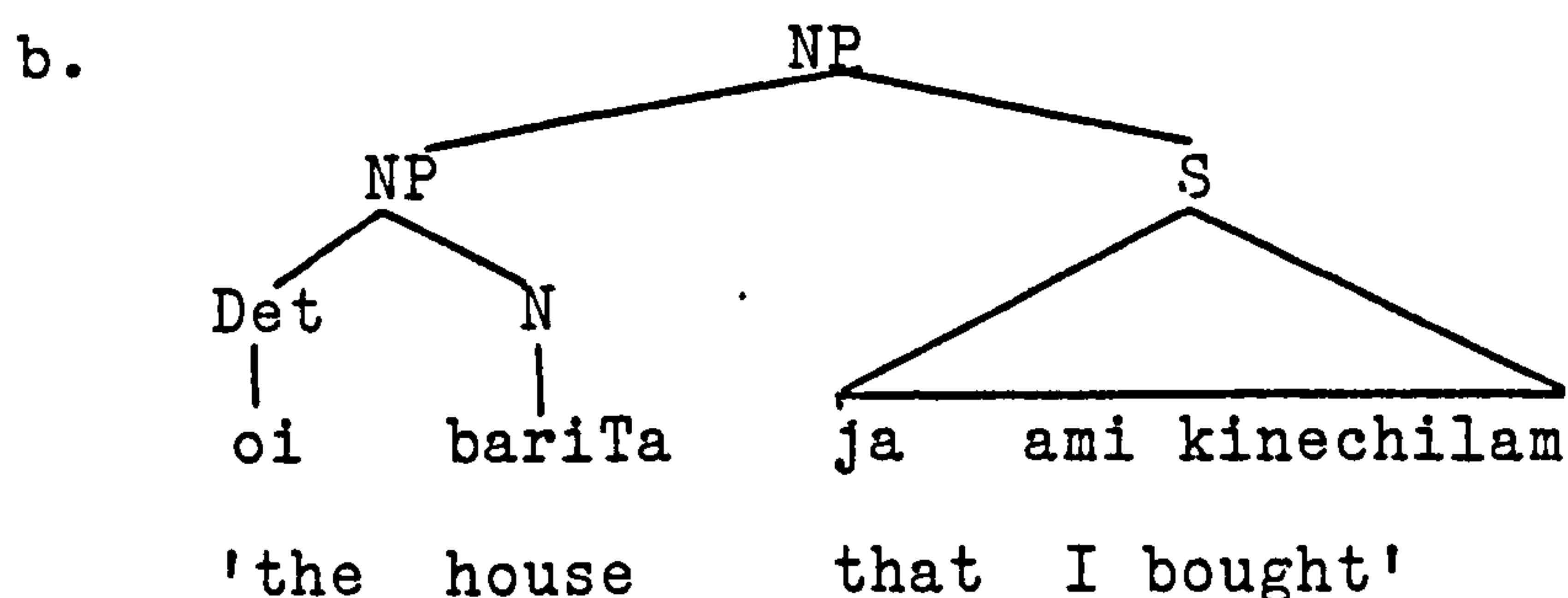
Chomsky (1965) has described the surface structure of a relative clause, where the relative clause is directly dominated by the NP. This description shows the determiner, the noun and the relative clause as being sister nodes of the same NP. This can be illustrated in the following examples with a tree-diagram.

- (63) a. oi bariTa ja ami kinechilam
 that house-the which I bought
 'the house that I bought'
- b. ei cheleTa je maThe dourachche
 this boy-the who field-in running
 'the boy who is running in the field'



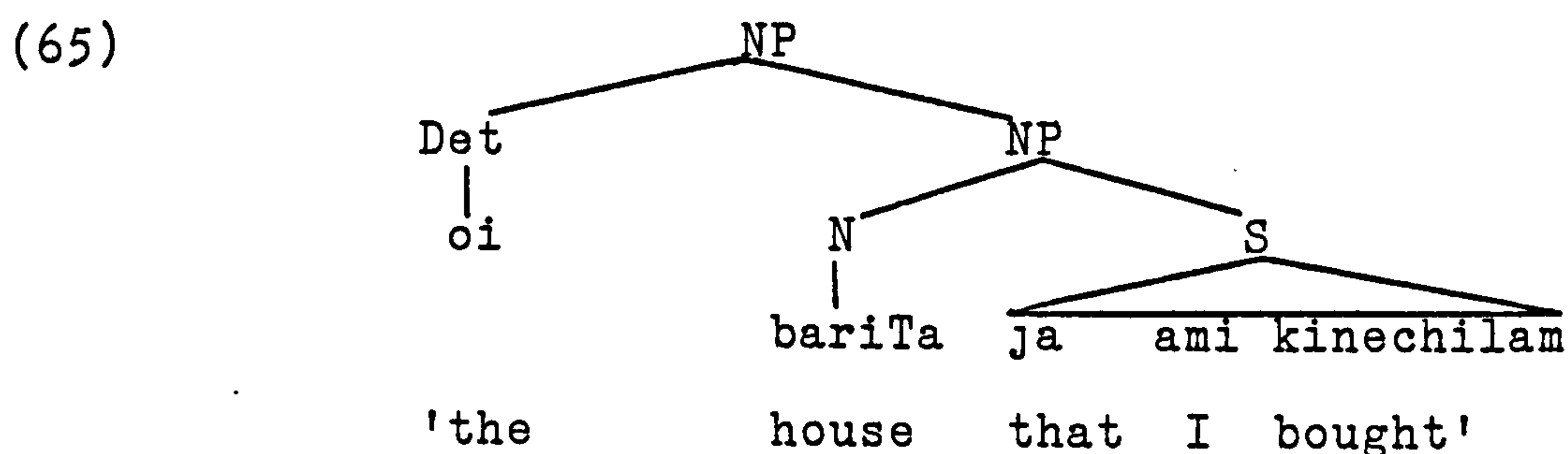
Ross (1967), Lakoff and Peter's (1969) formulation of the relative clause differs from Chomsky's analysis, as they show the relative clause as the aunt of the determiner and the noun. The determiner is dominated by the lower NP, whereas, the relative clause is dominated by the higher NP. In this formulation, the relative clause is the aunt of the determiner and the noun. The following tree-diagram is given to show the above formulation of the relative clause (example(63a) is repeated here).

(64) a. oi barita ja ami kinechilam
'the house that I bought'



The third reading on the structure of the relative clause is made by Stockwell, Schachter and Partee

(1973) and Partee (1975). According to their formulation, the noun and the relative clause are dominated by the same node, whereas, the determiner is dominated by the topmost NP node. From this reading the noun and the relative clause are dominated by the same node and hence they are sisters, whereas, they are niece of the determiner. The following tree-diagram is given to show the above configuration of the relative clause.



In the case of the Bengali relative clause, two phrase structure rules are necessary to show the exact structure of the relative clause. One can be formulated under Ross (1967), Lakoff and Peter's (1969) phrase structure hypothesis and the other from a different standpoint. Under the first phrase structure rule, the Bengali relative clause can be shown as $NP \rightarrow NP \ S$, where the antecedent precedes the relative clause. This may be shown in the following way:

- (66) a. cheleTa, je boi porche, se amar bondhu
 'The boy, who is reading a book, is my friend'

b. Relative Clause Formation Rule:

$$X \text{ --} [\text{NP} \text{ --} [Y \text{ --} \text{NP} \text{ --} Z] \text{ --}] \text{NP} \text{ --} W$$

NP S S NP

1 2 3 4 5 6 \Rightarrow Ob

1 2 je+3 0 5 se+6

Condition : 2 = 4

c. -- cheleTa boi porche cheleTa -- amar bondhu

X NP^{NP} -- Y -- NP -- Z S] NP -- W

1 2 3 4 5 6

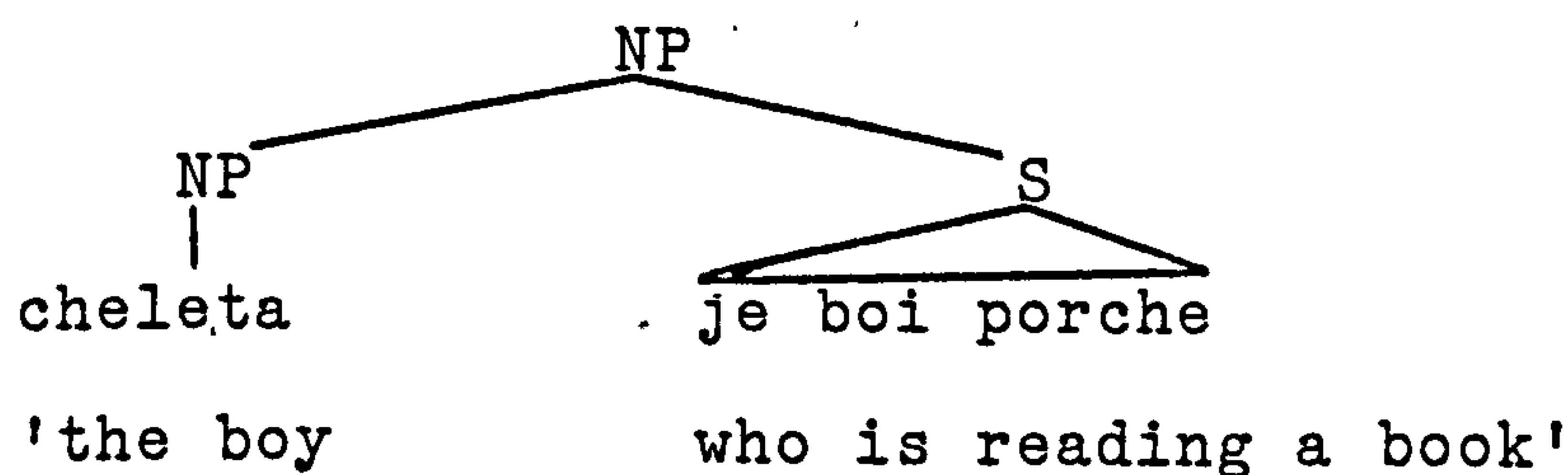
d. ____, cheleTa, je boi porche, 0, ____, se amar

1 2 je+ 3 4 5 se+ 6

bondhu

(66b) shows the appropriate phrase structure for the Bengali relative clause to be NP \rightarrow NP S, as shown in (66e).

(66) e.



However, a second phrase structure rule is necessary for conjoined sentences, namely the rule in (67).

(67) S \rightarrow S₁ and S₂

The appropriate rule for the sentence that shows the relative pronoun before the antecedent or the relative clause that occurs at the end of the sentence maybe illustrated in the following way:

(68) a. je cheleTa esechilo, se amar bondhu

'Who the boy came is my friend'

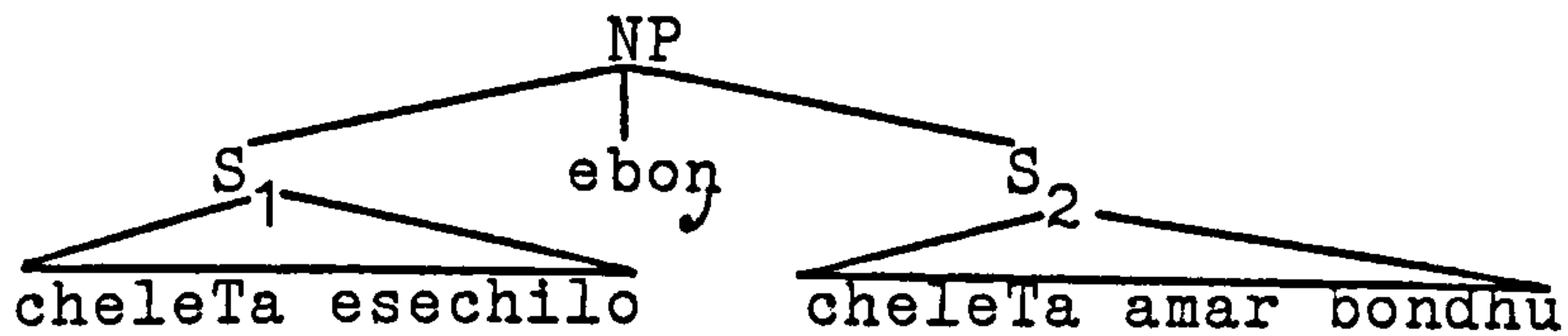
b. [cheleTa esechilo] [cheleTa amar bondhu]

boy-the came boy-the my friend

c. cheleTa esechilo ebon se amar bondhu

'The boy came and he is my friend'

d.



'The boy came and the boy is my friend'

e. X - NP^{INP} - Y] - NR^{[NP - Z]_{NP}] S - W}

1 2 3 4 5 6 ⇒ Ob

1 je+2 3 se+0 5 6

Condition: 2 = 4

f. cheleTa esechilo cheleTa amar bondhu

X-[NP - Y] - [NP - -Z]] W

NP

NP S

1 2 3 4 5 6 ⇒

g. je cheleTa esechilo se cheleTa amar bondhu

1 je + 2, 3 ,se + 0 , 5 , 6

Rule (68e) is also applicable for such sentences which do not have coreferential pronoun in the matrix sentence and allow the relative clause at the second conjoined sentence.

(69) a. ami ækTa meeke bhalobasi je pikaDelite behala
I a girl-to love who Piccadilly-in violin
bajae
plays

'I love a girl who plays violin in Piccadilly'

b. [ami æ kTa meeke bhalobasi]

I a girl-to love

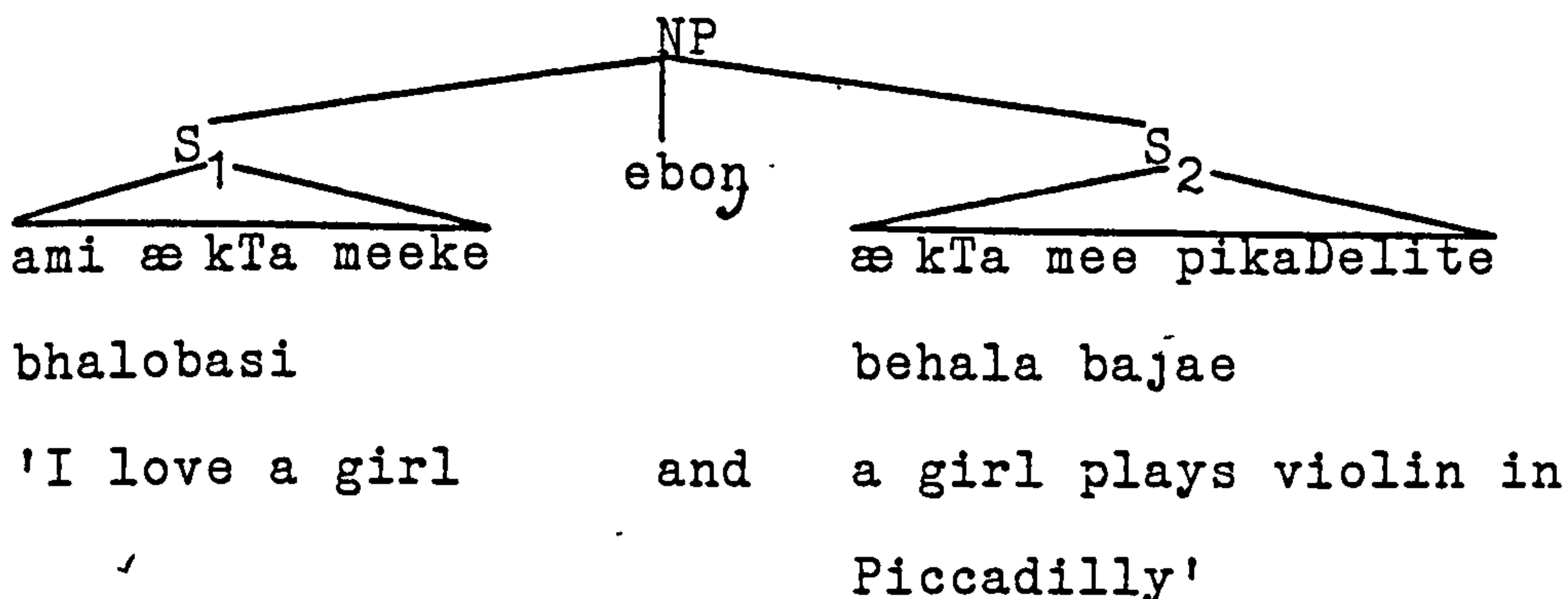
[æ kTa mee pikaDeli^ete b̥hala bajae]

a girl Piccadilly-in violin plays

c. ami æ kTa meeke bhalobasi ebon se pikaDelite
behala bajae

'I love a girl who plays violin in Piccadilly'

d.



1.3.4 Replacement of the Noun from the Matrix S

A further point may be stated here on the replacement of the noun from the matrix sentence for a co-referential pronoun in Matching Analysis. It has already been shown that a relative pronoun is introduced with the coreferential pronoun in Bengali relativization. This process clearly indicates the Pronominalization with relativization in Bengali. The relative pronoun is retained in the relative clause and the coreferential element is also retained in the matrix sentence. In the case of relativization, the NP is replaced by the relative

matrix sentence. In either case the identical NP chele can be retained either in the relative clause or in the matrix sentence. This may be shown in the following way:

- (72) a. $S_1 = NP_1 \quad NP_2 \quad V$
 b. $S_2 = NP_3 \quad NP_1 \quad V$
 c. $NP_2 : \underline{Je}$ 'who'
 d. $NP_3 : \underline{se}$ 'he'
 e. delete one NP_1 (chele 'boy') either from S_1 or S_2

Sentences like (71) could be explained by stating that the head noun has moved to the initial position in the sentence and the coreferential pronoun is retained in its place to give the surface realization of Bengali relative clause. Note that in such cases a comma intonation separates the head noun cheleTa 'the boy' from the matrix sentence.

1.3.5 Previous Work

In the preparation of this dissertation, all available sources on Bengali relativization have been consulted. Nothing so far has been done independently on Bengali relativization except the work of Kabir (1976) and Dasgupta (1980). Kabir (1976) has provided a partial study on relativization, which is incomplete in its approach, as his main interest was Pronominalization. He gives more emphasis to writing rules than to investigating practical

aspects of the language. Dasgupta (1980) studies Questions, Complement and Relative clauses in Bengali putting more emphasis on Questions and Complements. His study on relative clauses is scanty and incomplete. Neither writer provides any new insights on relativization. The study on Complement Constructions by Chattopadhyay (1976) was not available at the time of writing this dissertation. Any views expressed by her are therefore not included in the section on complement constructions.

1.3.6 Design of the Study

The purpose of the present study is to describe relativization in Bengali from different syntactic and semantic standpoints. In writing the rules of relativization, practical aspects of the language and theoretical aspects in recent transformational studies have been taken into account; but more emphasis is put on the practical framework than the theoretical.

1.3.7 Translation of Bengali Sentences into English

In the translation of Bengali sentences into English, the structure and meaning of the Bengali sentences are given priority and a literal translation is give. When the English translation seemed far from a normal English construction, a second translation has been given (sometimes through the use of brackets).

CHAPTER TWO

Relativization Process and Noun Phrase Accessibility

2.1 Relativization Process

2.1.1 Relativization

Relativization is a process whereby a sentence is embedded as a modifier in a noun phrase. In the standard transformational analysis of relative clauses the embedded sentence in the deep structure contains a noun phrase it modifies. The embedded sentence contains a coreferential noun phrase to be relativized. The relativizable noun phrase is normally moved to the front of the embedded sentence and later is replaced by a relative marker. The second identical noun phrase is replaced by a pronoun. The identical noun phrase may be described as the correlative construction in Bengali, i.e. the relative pronoun is normally followed by some other pronouns, so that one clause will have a relative pronoun, such as Je, Jini or Ja, and the other clause will have the corresponding correlative form (se, tini and ta respectively). The sentence which is to be the relative clause may be placed either to the left or to the right of the matrix sentence. When a sentence is embedded in the matrix sentence, the embedded sentence which constitutes the relative clause contains the relative pronoun, or the relative pronoun and the head noun, whereas the head noun may be retained in the matrix sentence with the coreferential pronoun, or the head noun may be substitute

for the coreferential pronoun, or the head noun may occur without any coreferential pronoun.

2.1.2 Derivation of Bengali Relative Clauses

There are seven different possible relative clause patterns in Bengali, five of which are common. The distinction turns on the occurrence of the head noun, the relative and coreferential markers, and the placement of the relative and matrix sentences in complex structure.

The distribution of antecedents in the relativized sentences can also be explained in different ways. The antecedent can be retained in the matrix sentence and before the relative clause (cf.6) if the relative clause is completely embedded in the matrix sentence. When the antecedent is retained in the relative clause after the relative pronoun, it does not show complete embedding of the relative clause in the matrix sentence (cf.1, 3). When the antecedent occurs in the relative clause following the relative pronoun, it can be taken as a deictic relative clause, as a close juncture exists in between the relative pronoun and the antecedent. When the antecedent occurs before the relative clause, it is separated from the relative clause with a comma intonation.

Moreover, a relative pronoun may occur in the relative clause either with (cf.1, 3, 7) or without (cf.2) any antecedent and the coreferential marker is retained in

the matrix sentence either with (cf.3, 4, 5, 6, 7) or without (cf.1, 2, 8) any antecedent. When a relative clause is embedded in the matrix sentence, the antecedent normally occurs before the relative clause and the co-referential pronoun may remain absent in the matrix sentence, but the antecedent is retained within it (cf.7).

The relativization process in Bengali shows in particular the relative pronoun before or inside the relative clause and the coreferential pronoun in initial position in the matrix sentence (cf.1-7). The common type of relativization involves the occurrence of Je-se 'who-he' and Ja-ta 'what-that'. In the case of complete embedding, the identical NP is deleted from the relative clause for a relative pronoun and the NP is retained in the matrix sentence (cf.6). In another process, the identical NP is deleted from the matrix sentence for a coreferential pronoun and is retained in the relative clause (cf.1, 4). This process clearly indicates that the head noun may be retained either in the relative clause or in the matrix sentence either with a relative or a coreferential pronoun, except in the case of the headless relatives (where no head noun is retained either in the matrix sentence or in the relative clause) or in sentences like (7) where no co-referential pronoun occurs in the matrix sentence with the identical NP. When the antecedent is retained before the relative clause, the relative construction shows the structure NP + S and when the antecedent is retained in the relative clause, the structure becomes Je+S, which in turn,

does not show the true structure of a relative clause.

Note, as mentioned above, when the antecedent is dropped from the relative clause and is retained after the coreferential pronoun in the matrix sentence, the matrix sentence becomes deictic. The occurrence of an antecedent after the relative and the coreferential pronoun shows that in either case the relative clause becomes deictic. The following examples are given to illustrate the above features of Bengali relative clauses ("___" represents a close juncture after Je, as Je-).

(1) Je - cheleTa amar bondhu, se esechilo
 who boy-the my friend he came
 'Who the boy (is) my friend (he) came'
 ['The boy who is my friend came']

(2) a. amar bondhu Je, se esechilo
 my friend who he came
 'He came who (is) my friend'
 b. Je amar bondhu, se esechilo
 who my friend he came
 'Who (is) my friend (he) came'

(3) Je amar bondhu, se cheleTa esechilo
 who my friend he boy-the came
 'The boy came who (is) my friend'

(4) se esechilo, Je-cheleTa amar bondhu
 he came who boy-the my friend
 'He came the boy who (is) my friend'
 ['The boy who is my friend came']

- (5) se-cheleTa amar bondhu, Je esechilo
 he boy-the my friend who came
 'He the boy (is) my friend who came' (lit)
- (6) cheleTa, Je amar bondhu, se esechilo
 boy-the who my friend he came
 'The boy, who (is) my friend, (he) came'
- (7) amar æ kTa boi ache, Ja ammu kine dieche
 I a book have which mother bought has
 'I have a book which mother bought for me'

The above examples (1-7) show the distribution of relative clauses and matrix sentences, and the process of complete and partial embedding of the relative clauses. Sentence (1) shows partial embedding of the NP and the retention of the NP in the relative clause with the relative pronoun, and the deletion of the identical NP from the matrix sentence. As the postcedent[cheleTa 'the boy'] occurs after the relative pronoun, the relative clause becomes deictic due to the presence of a close juncture between them. When a relative pronoun occurs before any postcedent and a close juncture exists between them, it will be regarded as a deictic relative clause. If a relative pronoun occurs before any postcedent but is separated with a comma intonation, it will be considered as a non-deictic relative clause (e.g. Je-cheleTa 'who the boy': deictic relative clause; Je, cheleTa 'Who, the boy: non-deictic relative clause). This distinction (i.e. the presence of any close juncture between the relative pronoun

and the postcedent and an intonation between the relative pronoun and the postcedent or antecedent) is important in determining whether a relative clause is deictic or non-deictic. This discussion has been elaborated in 3.4.1.

(2) illustrates a structural pattern identical to (1) except for the absence of the postcedent. This kind of relative clause can be taken as an illustration of headless relatives, as no head noun occurs either in the relative clause or in the matrix sentence. (3) also shows partial embedding. The postcedent occurs in the matrix sentence and it also becomes deictic due to the occurrence of the coreferential pronoun before the postcedent with a close juncture, where the matrix sentence occurs before the relative clause. (4) shows the opposite structure to (1). The postcedent is retained in the relative clause and the relative clause becomes deictic due to the occurrence of the relative pronoun before the postcedent with a close juncture between them. This sentence also shows partial embedding of the NP. (5) illustrates a structure where the matrix sentence occurs with the postcedent and the coreferential pronoun precedes the relative clause. The matrix sentence becomes deictic as there is close juncture between the coreferential pronoun and the postcedent. The relative clause shows partial embedding in (5). Among these sentences, only (6) shows complete embedding of the relative clause in the matrix sentence. The antecedent occurs before the relative clause and the coreferential pronoun after it in the matrix sentence. Though the matrix

sentence contains both the antecedent and the coreferential pronoun, it is not deictic, as the relative clause stands in between the antecedent and the coreferential pronoun and a comma intonation exists between the antecedent and the relative clause. The relative clause Je amar bondhu 'who is my friend' shows its embedding within the matrix sentence cheleTa esechilo 'The boy came'. (7) illustrates a different kind of structure of a Bengali relative clause where no coreferential pronoun occurs in the matrix sentence which also contains the antecedent. However, this sentence shows partial embedding of the relative clause in the matrix sentence and hence the relative clause can be regarded as a subordinate clause like the other relative clauses which are illustrated earlier except that of (6).

Of the examples which are given above, only (4) and (5) do not show commonly used patterns. Though these sentences are grammatical, they are less easily comprehended by speakers of the language.¹ As sentences like (4) and (5) are not completely acceptable to all speakers of the language, these types of sentences will not be discussed further. All the sentences illustrated in (1-7) have the structure Je - NP or NP - S. The first five sentences show the Je - NP structure, whereas, the last two sentences exhibit the NP - S structure.

1. A test was conducted on the two sentences (4) and (5) with ten native speakers living in the U.K. Eight of them firmly rejected the sentences as not readily comprehensible.

Bengali relative clauses show different processes of embedding. The subordinate clause that constitutes the relative clause does not show complete embedding for all types of relative clauses. When a sentence is either completely or partially embedded in another sentence, either the first sentence can embed the second sentence or the second sentence can embed the first sentence in a complex construction. (The words "first" and "second" merely refer to the order in which sentences are presented in the description and have no theoretical significance.) Embedding can be taken to operate where the sentences are constituents of other sentences (Brown and Miller, 1980: 134). The sentence which dominates the other sentence is known as the matrix sentence and the sentence which is embedded under the constituents of the matrix sentence can be regarded as a relative clause. From this consideration, a brief statement can be made here on the embedding process and the distribution of the relative clauses in Bengali.

In the case of embedding, Bengali relative clauses can be explained from two standpoints regarding their construction. Some sentences show complete embedding of the relative clause in the matrix sentence (cf.6); other types of relative clause, however, show only partial embedding. Most of the relative clauses in Bengali show this latter kind of structure (cf.1, 2, 3, 4, 5, 7).

The examples given previously in (1-7) clearly show that except (6), all other sentences do not show complete embedding of the relative clauses in the matrix

sentences. In most of the cases, Bengali relative clauses show partial embeddings and stand as subordinate clauses next to the main clauses. From this perspective, Bengali relative clauses can be regarded as subordinate clauses which may occur either before or after the main clause. Only sentences like (6) can be interpreted as an illustration of complete embedding of the relative clause in the matrix sentence. The process of embedding is fully illustrated in (8).

- (8) a. cheleTa amar bondhu
 boy-the my friend
 'The boy (is) my friend'.
- b. cheleTa esechilo
 boy-the came
 'The boy came'
- c. [cheleTa amar bondhu][cheleTa esechilo]
 boy-the my friend boy-the came
 'The boy (is) my friend' 'The boy came'
- d. Je[cheleTa amar bondhu] se[cheleTa esechilo]
 who boy-the my friend he boy-the came
 'Who the boy (is) my friend he the boy came'
 ['The boy who is my friend came']
- e. [Je cheleTa amar bondhu][se cheleTa esechilo]
 who boy-the my friend he \emptyset came
 'Who the boy (is) my friend (he) came'
 ['The boy who is my friend came']

matrix sentence can be explained from two different standpoints. To put it in a different way, Bengali relativization can be explained through two types of rules, both of which are T-rules: (i) an embedding rule, (ii) and an insertion rule. It is already seen that the embedding-only approach does not account satisfactorily for the insertion of Je-se and Ja-ta in the relative clause and in the matrix sentence. It explains only the deletion of the identical NPs and the insertion of either Je 'who' or se 'he/she' in the relative clause and in the matrix sentence. The way Je-se or Ja-ta are inserted in the relative clause and the matrix sentence can be explained via a second T-rule (insertion rule). In relativization, two simple sentences contain identical NPs, and one of the shared NPs is deleted for a relative pronoun in the relative clause. When a relative clause shows either complete or partial embeddings in Bengali, the insertion of the relative pronoun (je 'who') can be explained easily, but the insertion of the coreferential pronoun (se 'he/she') remains unexplained. It can be explained through an additional transformational rule which provides for the insertion of se in the matrix sentence, or when the identical NP is deleted in the matrix sentence for a coreferential pronoun; it provides for the insertion of Je in the relative clause. This can be explained through the examples already provided in (8) to explain different types of embeddings and the distribution of relative and coreferential pronouns in relative and matrix sentences.

(8e) shows that the shared NP is retained in the relative clause and is deleted in the matrix sentence for a co-referential pronoun se 'he'. This explains the deletion of the NP for a coreferential pronoun in the matrix sentence but not the relative clause which contains both the shared NP cheleTa 'the boy' and the relative pronoun Je 'who'. As the shared NP is retained in the relative clause, it cannot be said that the relative pronoun is retained for the deleted NP. As the relative clause retains both the NP and the relative pronoun, the retention of the relative pronoun can be explained through a second transformational rule which explains that Je 'who' is inserted in the relative clause through a separate T-rule and not by any embedding rule. This T-rule is identical to cleft and Pseudo-cleft transformations where eTa 'it' and Ja 'what' are introduced in sentence-initial positions to form a cleft and a pseudo-cleft sentence (cf.7.2). This T-rule solves the problem of retaining both the relative pronoun and the shared NP in the relative clause or the shared NP and the coreferential pronoun in the matrix sentence. From this perspective, it can be said that Bengali relativization requires both embedding (which is also a T-rule) and a second T-rule to explain Je-se or Ja-ta occurrences in relative clause and in the matrix sentence. The application of the second T-rule also explains the retention of Je-se 'who-he/she' where the relative clause shows complete embedding (cf.6). In that example, [cheleTa, Je esechilo, se amar bondhu 'The boy, who came, is my friend' or

cheleTa, Je amar bondhu, se esechilo 'The boy, who is my friend, came], the process of embedding explains the retention of the NP cheleTa 'the boy' before the matrix sentence but fails to explain the insertion of the correlative (se 'he') in the matrix sentence. The second T-rule is capable of handling the problem of the correlative insertion in the matrix sentence like the partial embedded relative clause and it can be said that se 'he' is inserted in the matrix sentence through the second T-rule. So both types of relative clauses (partially and completely embedded relative clauses) are constituted in Bengali through the process of embedding (first T-rule) and the insertion rule (second T-rule). This can be illustrated in the following manner.

- (9) a. cheleTa amar bondhu
 boy-the my friend
 'The boy (is) my friend'
- b. cheleTa esechilo
 boy-the came
 'The boy came'
- c. [cheleTa amar bondhu][cheleTa esechilo]
 boy-the my friend boy-the came
- d. [Je cheleTa amar bondhu] se Ø esechilo
 who boy-the my friend he came
 'Who the boy (is) my friend (he) came
 ['The boy who is my friend came']
 (i) se 'he' is inserted in the matrix sentence

through the second T-rule;

- (ii) Je 'who' is inserted in the relative clause through embedding (first T-rule).

e. cheleTa [Je amar bondhu][se Ø esechilo]

boy-the who my friend he came

'The boy, who (is) my friend, (he) came'

- (i) Je 'who' is inserted in the relative clause through embedding (first T-rule);

- (ii) se 'he' is inserted in the matrix sentence through the second T-rule;

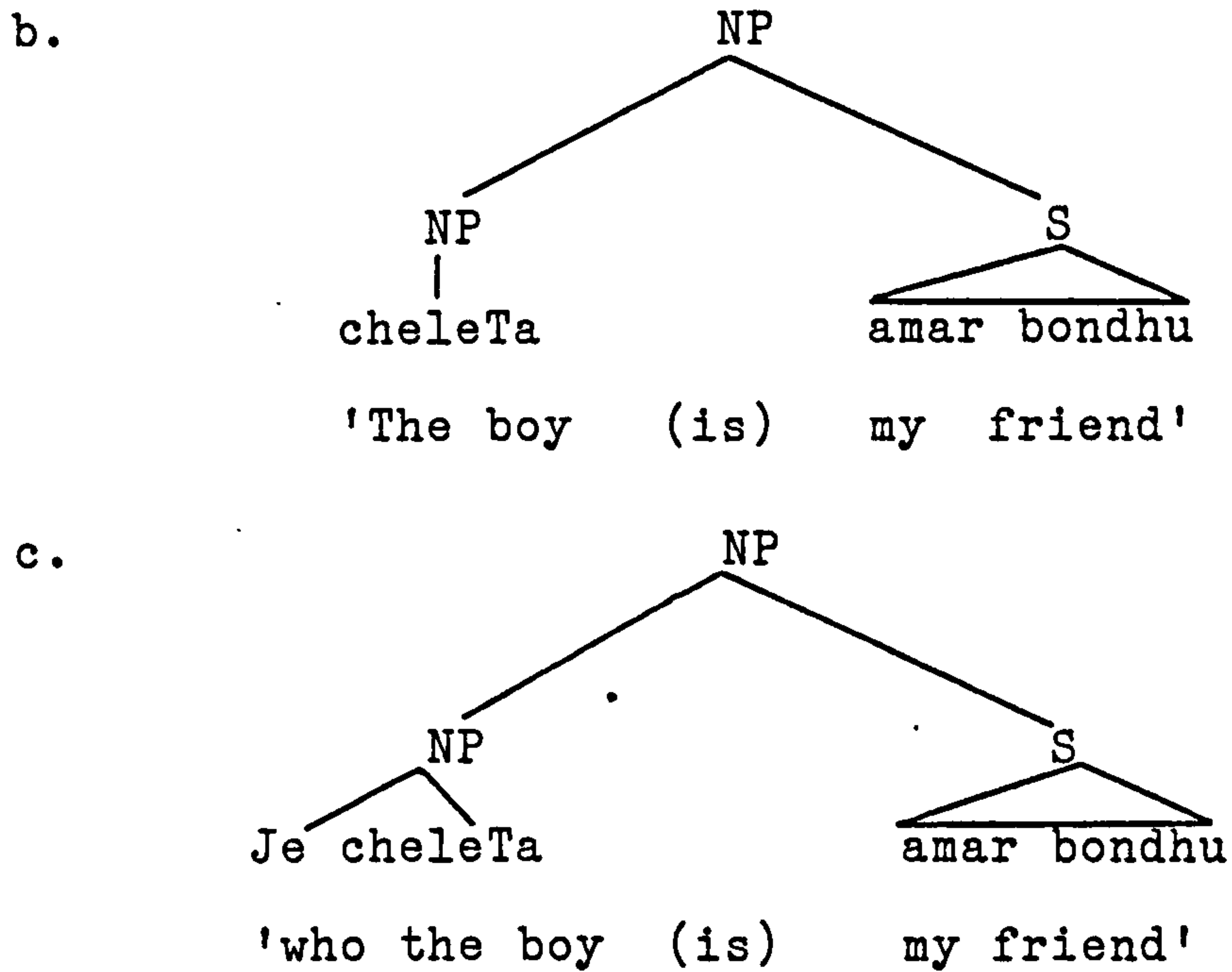
- (iii) Je 'who' is deictic in (9d) as the NP (cheleTa 'the boy') follows the relative pronoun with a close juncture;

- (iv) Je 'who' is non deictic in (9e) as the antecedent (cheleTa 'the boy') precedes the relative pronoun with a comma intonation.

The way the T-rule applies to insert Je 'who' and se 'he' in the relative clause and in the matrix sentence can be shown as follows. (10a) shows the head noun with the relative pronoun and (10b) shows the head noun with the correlative pronoun (i.e. in the matrix sentence). (10b) and (10c) show the structure of the relative clause before and after Je-insertion. (11b) and (11c) show the structure of the matrix clause before and after se-insertion.

- '10) a. Je-cheleta amar bondhu, se esechilo
who boy-the my friend he came

'Who the boy (is) my friend (he) came'
 ['The boy who is my friend came']



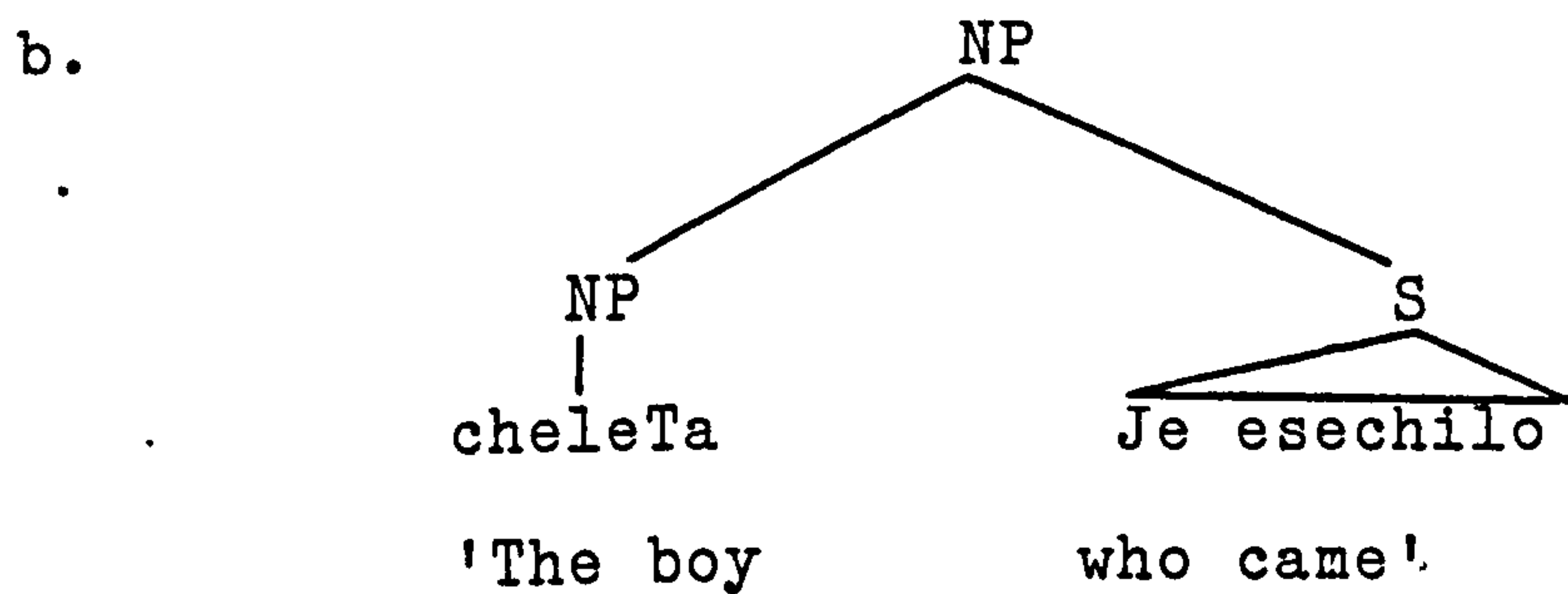
d. Je Insertion:

SD: NP - S

1 2 \Rightarrow Ob

SC: Je + 1 2

(11) a. cheleTa, Je esechilo, se amar bondhu
 boy-the who came he my friend
 'The boy, who came, is my friend'



c. Je Insertion:

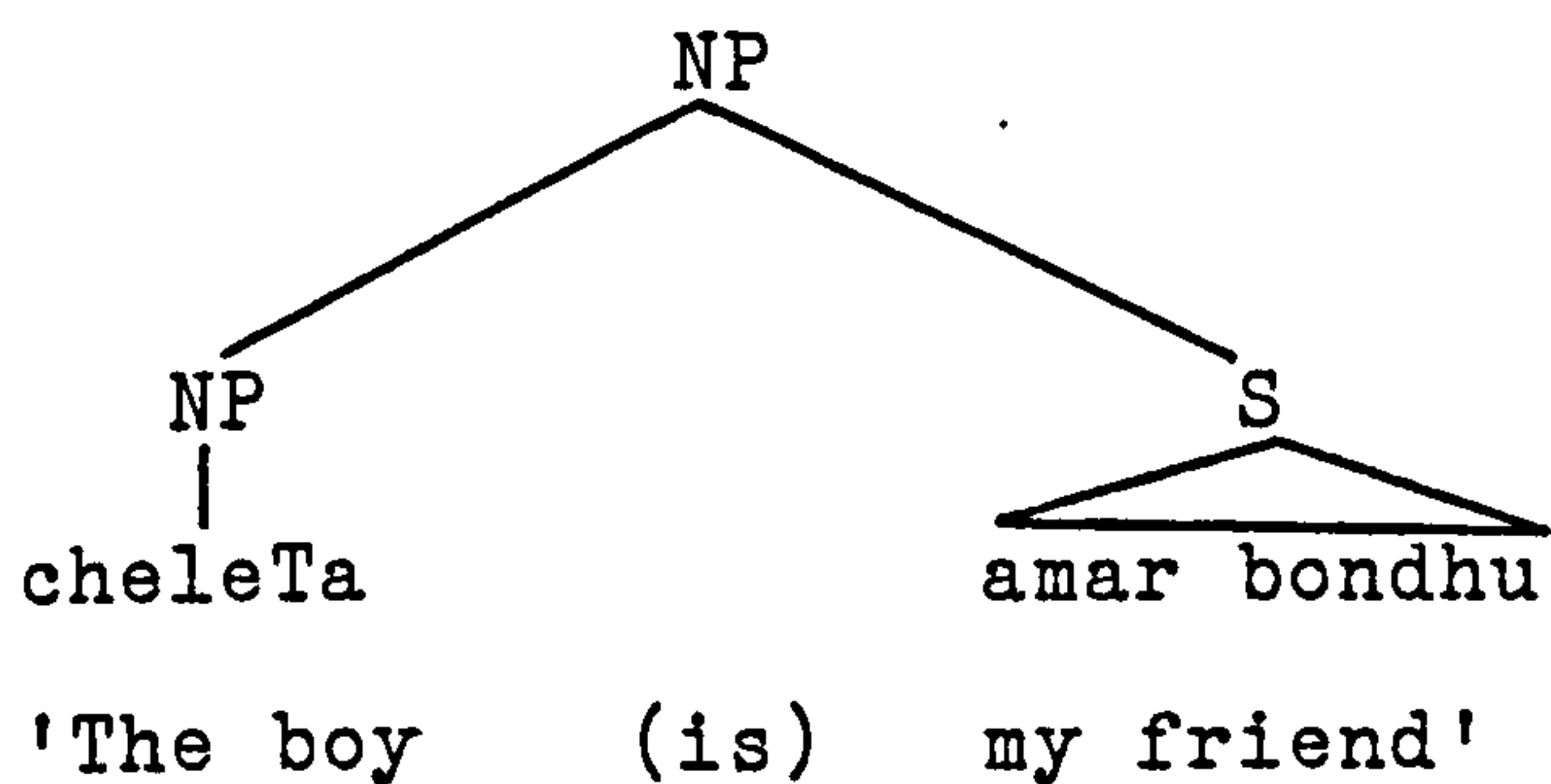
SD: NP - S

1 2 \Rightarrow Ob

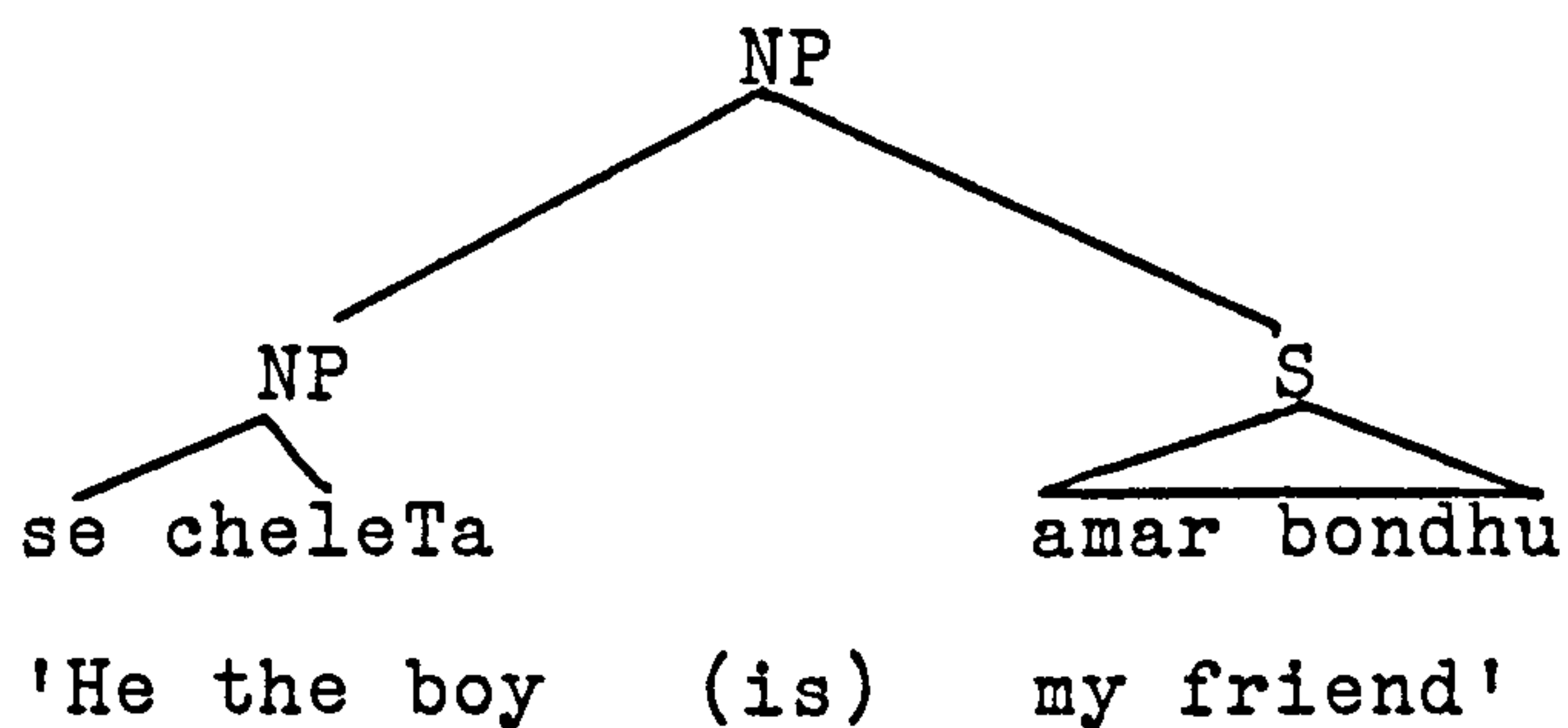
SC: 1 Je + 2

- (12) a. Je esechilo, se-cheleTa amar bondhu
 who came he boy-the my friend
 'Who came (he) the boy (is) my friend' (lit)
 ['The boy who came is my friend']

b.



c.



d. se Insertion:

SD: NP- S

1 2 \Rightarrow Ob

SC: se + 1 2

The T-rules which are shown in (9-12) are capable of handling the relative-correlative structures in Bengali relative clauses. A brief summary can be given here on the structure and distribution of relative clauses in Bengali

which includes the matrix sentence, the antecedent, the postcedent, the relative and coreferential markers.

- (13) a. Relative clauses can be partially or completely embedded.
- b. Both types (partially and completely embedded) of relative clauses show embedding (first T-rule) and a second T-rule for the relative and correlative structures.
- c. The relative clause may precede either the matrix sentence or follow it.
- d. The postcedent may be retained either in the relative clause or in the matrix sentence.
- e. The antecedent is retained in the matrix sentence.
- f. Je and se 'who-he/she' normally occur in the relative clause and in the matrix sentence respectively.
- g. The relative pronoun can either precede or follow the head noun in a relative clause.
- h. If the postcedent occurs in the matrix sentence, the coreferential pronoun always occurs before the postcedent.
- i. The coreferential pronoun can be dropped only in the matrix sentence preceding the relative clause and the antecedent does not become deictic.
- j. A relative clause or a matrix sentence becomes

deictic when the postcedent occurs before the relative or the correlative pronoun with a close juncture.

- k. A relative clause or a matrix sentence becomes non-deictic if the antecedent occurs before the relative clause with a comma intonation.

2.1.3 Occurrence of Head Nouns

On the basis of the above discussion, relative clauses can be examined on broad distributional criteria on the basis of head nouns, coreferential markers and the occurrence of the relative and matrix sentences. The examples that are given in (1-7) may be repeated here for convenience. This study supplements (1-7), where a short discussion was made on different types of relative clause.

- (14) a. Je cheleTa amar bondhu, se esechilo
 who boy-the my friend he came
 'Who the boy is my friend came'
 ['The boy who is my friend came']
- b. Je amar bondhu, se esechilo
 'Who is my friend came'
- c. Je amar bondhu, se cheleTa esechilo
 'Who is my friend he the boy came' (lit)
 ['The boy came who is my friend']

- d. se esechilo, Je cheleTa amar bondhu
 'He came who the boy is my friend' (lit)
 ['He came the boy who is my friend']
- e. se cheleTa amar bondhu, Je esechilo
 'He the boy is my friend who came' (lit)
 ['The boy came who is my friend']
- f. cheleTa, Je amar bondhu, se esechilo
 'The boy, who is my friend, came'
- g. amar æ kTa boi ache, Ja ammu kine dieche
 my a book have which mother bought-has
 'I have a book which mother bought for me'

All these examples show the occurrence of the head nouns in different positions in sentences. The head noun occurs inside the relative clause after the relative marker in (14a). (14b) shows the absence of any head noun. The head noun occurs in the matrix sentence after the coreferential marker in (14c). In (14d), the occurrence of the head noun is identical to (14a), the only difference is that the relative clause occurs after the matrix sentence. (14e) is identical to (14c); the only difference is that the matrix sentence occurs before the relative clause. (14f) shows the initial occurrence of the head noun before the relative clause. The head in (14g) occurs in the matrix sentence and before the relative clause.

2.1.4 Occurrence of Relative and Correlative Markers

The way the relative and correlative markers occur in (14) can be described in the following manner:

- (15) a. The relative marker may occur in the relative clause either before or after the head noun or without any head noun before or after it;
- b. The coreferential marker may occur in the matrix sentence either with a head noun after it or the coreferential marker may totally remain absent.

Except for the type of structure illustrated in (14g), the relative and correlative markers in Bengali are obligatory and each can precede or follow the other. The relative pronouns occur in two positions in the relative clause, either before or after the head nouns. When a relative pronoun occurs before any head noun, the complex sentence shows partial embedding. When a relative pronoun occurs after the head noun it shows complete embedding. The third possibility is the absence of any head noun either before or after the relative marker. In this case the relative clause is headless.

The correlative marker can occur in three structures in the matrix sentence. It should be mentioned here that the occurrence of the correlative marker with the head noun is fixed in the matrix sentence; the correlative marker always occurs after the head noun and never before it. The

correlative marker may also occur without any head noun before it, if the head noun occurs or remains absent in the relative clause. In the third structure the matrix sentence contains no coreferential marker.

2.1.5 The Position of the Relative Clause and the Matrix Sentence in the Complex Construction

The common pattern of a complex sentence in Bengali has the relative clause before the matrix sentence, but this order may be reversed. The examples which are given in (14) can be explained on the occurrence of the embedded and the matrix sentences. The seven examples which are given in (14) show the relative clause preceding the matrix sentence four times and the matrix sentence preceding the relative clause three times. When the relative clause occurs before the matrix sentence, it may be taken as Forward Relativization, and when it occurs after the matrix sentence, it may be taken as Backward Relativization. Forward Relativization is more comprehensible in Bengali as it shows the SOV pattern, i.e. SOV is normal word order in Bengali. This can also be shown in Gapping where Forward Gapping is more comprehensible than Backward Gapping. The examples which are shown in (14) may be repeated here to show Forward and Backward Relativization in Bengali.

(16) a. Forward Relativization

Je cheleTa esechilo, se amar bondhu

who boy-the came he my friend

'Who the boy came is my friend'

['The boy who came is my friend']

b. Backward Relativization

se amar bondhu, Je cheleTa esechilo

he my friend who boy-the came

'He is my friend the boy who came' (lit)

['The boy who came is my friend']

2.1.6 Restrictive Relative Clause

Relative clauses can be classified with respect to whether they modify the head noun restrictively or non-restrictively. In restrictive relative clauses the modification of head noun is essential as it is dependent upon the accompanying modification. The role of modification is displayed together with the relative clause and the head noun that occurs inside the clause. The process of modification shows that both the relative clause and the head noun occur side by side without any break by intonation contour and thus it limits the meaning of the head noun which the relative clause modifies. So the restrictive relative clause has a defining or determining role in is modification. In restrictive clauses, the relative pronoun

occurs before the head noun. In another sense, the restrictive clause identifies the particular item which is referred to the head noun. It is assumed that a relative clause is shown to be restrictive by being derived from a sentence embedded in the structure [Je NP]. The restrictive relative clause in Bengali shows partial embedding and the relative clause contains the head noun, whereas, the matrix sentence contains the coreferential pronoun, which replaces the identical noun phrase. The following examples are given to illustrate restrictive relative clauses in Bengali.

- (17) a. Je MeeTa amar bandhobi, se namkora gaika
 who girl-the my friend she famous singer
 'Who the girl is my friend is a famous singer'
 ['The girl who is my friend is a famous singer']
- b. Je corTa ei elaka cinto, se curi koreche
 who thief-the this area knew he stolen-has
 'Who the thief knew this area has stolen'
 ['The thief who knew this area has stolen']
- c. Je boiTa ami porchi, seTa samproti kena
 which book-the I reading that recently bought
 'Which the book I am reading was bought recently'
 ['The book which I am reading was bought recently']

In (17a), Je amar bandhobi 'who is my friend' is the relative clause and meeTa 'the girl' is the head noun which

is modified by the relative clause. The head noun and the relative pronoun occur side by side typically without any break by intonation or it may be said that there exists a close juncture between the head noun and the relative pronoun. The relative clause cannot be removed from the head noun which it modifies. The meaning of the sentence indicates that I have several friends but only one of them has been referred to in the sentence. In other words, restrictive relative clauses pick out one object from a set of objects and specify it as the one the speaker is paying attention to. Non-restrictive relatives merely mention a property of an object in passing. (17b) also is interpreted restrictively. The relative clause Je ei elaka cinto 'Who knew this area' shows the restrictive modification of the head noun corTa 'the thief'. The meaning of the clause indicates that there are many thieves, but the one who knew the area well has stolen something. (17c) shows that the relative clause is constituted with the inanimate head noun which it modifies. These examples show that the head noun in the restrictive clause can be either an animate or an inanimate noun.

2.1.7 . Non-Restrictive Relative Clause

A non-restrictive relative clause provides different information against the head noun which it modifies. From this point of view, if the relative clause is separated

from the matrix sentence, it would not affect the overall meaning of the modified head noun that occurs in the matrix sentence. In a non-restrictive relative clause the modifying clause provides some extra information on the head noun. Quirk et al (1979: 620) term this kind of modification as intensive relationship between the two sentences. The modification of the antecedent provided in the non-restrictive clause does not affect the meaning or the reference of the head noun, as it can stand alone without the modification provided by the non-restrictive clause. Due to the structure of this type of clause the head noun can never be deleted as it affects the structure of the matrix sentence. If the hearer is aware of the reference of the head noun then the extra information provided by the relative clause is unnecessary and the head noun can be separated from the relative clause to become non-restrictive (Stockwell, 1977: 162). This may be shown in the following way:

(18) a. [parTeks bes mojbut][parTeks paThkaThi theke
 Partex quite strong Partex jute sticks from
 toiri hœe]
 made is

b. parTeks bes^{mojbut} [parTeks paTkaThi theke
 toiri hœe]

→ c. parTeks, Ja paTkaThi theke toiri hœe, ta bes
 mojbut
 'Partex, which is made of jute sticks, is quite
 strong'

The embedding of the second sentence in the first sentence indicates that the second sentence which constitutes a relative clause provides extra information about the head noun which is non identifying in nature and makes it as the non-restrictive relative clause. This shows that when a clause is added after the head noun (parTeks 'Partex': a kind of board made from jute-sticks) in the non-restrictive relative, it does not restrict its antecedent or the head noun in its meaning or reference (parTeks bes mojb̃but 'Partex is quite strong'). In (18), after adding the relative clause (Ja paTkaThi theke toiri h̃e 'Which is made of jute-sticks') after the head noun provides inessential modification for the head noun.

It is understood from the above discussion that a non-restrictive relative clause is non-defining and is separated from the head noun by a comma intonation¹ which indicates the non-existence of any close juncture between the head noun and the relative clause. The comma intonation separates the head noun from the relative clause and shows that the latter is in apposition to the head noun it modifies. The following examples are given below to show the nature of non-restrictive clauses in Bengali.

(19) a/

1 'Comma intonation' is applied here to show the existence of pause between the head noun and the relative pronoun in surface structure of any non-restrictive relative clause.

- (19) a. robindronath, Jini prokkhato kobi, tini nobel
 Rabindranath who famous poet he Nobel
 puroskar peechilen
 Prize received
 'Rabindranath, who was a famous poet, received
 the Nobel Prize'
- b. amar bondhu, Jini galpolekhok, tini aJ
 my friend who story-writer he to-day
 bissobiddalaje boktrita deben
 University-to talk deliver-will
 'My friend, who is a story-writer, will deliver a
 talk to-day to the University'

Both in (19a) and (19b), the relative clauses provide extra information about the referent of the head nouns robindronath 'Rabindranath' and bondhu 'friend'. If the relative clauses are separated from the modified clauses, it would not affect the meaning of the head nouns, whose referents are already identified in the matrix sentences robindronath nobel puroskar peechilen 'Rabindranath received the Nobel Prize' and amar bondhu aJ bissobiddalaje boktrita deben 'My friend will deliver a talk to-day to the University'. In (19a) and (19b), the relative clauses provide extraneous information about the modified head nouns robindronath 'Rabindranath' and bondhu 'friend' respectively. If the modifying relative clauses are separated from the head nouns, the meaning of the head nouns will not be affected as shown in (20).

- (20) a. robindronath, Jini prokhhato kobi, tini nobel
puroskar peechilen
'Rabindranath, who was a famous poet, received
the Nobel Prize'
- á. robindronath nobel puroskar peechilen
'Rabindranath received the Nobel Prize'
- b. amar bondhu, Jini gǎlpolekhok, tini aJ
bissobiddalǎJe boktrita deben
'My friend, who is a story-writer, will deliver
a talk to-day to the University'
- ǎ. amar bondhu aJ bissobiddalǎJe boktrita deben
'My friend will deliver a talk to-day to the
University'

These examples show the structure of the non-restrictive relative clauses which are in apposition to the head nouns they modify. robindronath 'Rabindranath' and prokhhato kobi 'a famous poet' and amar bondhu 'my friend' and gǎlpolekhok 'story-writer' refer to the same person.

In restrictive relatives the postcedents follow the relative pronouns, while in non-restrictive relatives, the relative pronouns follow the antecedent. So, it can be said that the non-restrictive relatives in general occur postnominally. The simplest way to change a non-restrictive relative into a restrictive one is to move the relative pronoun before the head noun without any pause and to change the construction of a restrictive clause into a non-restrictive clause is to move the head noun before the

relative pronoun with a comma intonation.

As has been stated above, in restrictive relative clauses the relative marker occurs before the postcedent, while it occurs after the antecedent in non-restrictive relative clauses. The antecedent in non-restrictive relative clause is separated by a comma intonation in surface structure while no such intonation exists in the restrictive clause between the postcedent and the relative marker. The use of comma intonation is very important in signalling the distinction between restrictive and non-restrictive relative clauses. The following sentences exemplify two clause types in Bengali.

- (21) a. Je cheleTa amar bondhu, se esechilo
 who boy-the my friend he came
 'Who the boy is my friend came'
 ['The boy who is my friend came']
- b. cheleTa, Je amar bondhu, se esechilo
 'The boy, who is my friend, came'

Movement of the head noun is permissible in restrictive relative clauses as the head noun occurs inside the clause. As the head noun is separated from the rest of the matrix sentence by the relative clause, no movement of head noun is normally allowed in non-restrictive clauses. The following examples show how the head noun can be moved in restrictive relative clauses.

- (22) a. Je lokTa boi bikkri korto, se more gæ che
 who man-the book sell used-to he died has
 'Who the man used to sell books has died'
 ['The man who used to sell books has died']
- b. boi bikkri korto Je lokTa, se more gæ che
- c. boi je lokTa bikkri korto, se more gæ che
- (22') a. cheleTa, Je esechilo, se amar bondhu
 boy-the, who came, he my friend
 'The boy, who came, is my friend'
- b. se amar bondhu, cheleTa, Je esechilo

The head noun of the relative clause [lokTa 'the man'] occurs in the initial position of the relative clause in (22a), medial position in (22b), and final position in (22c).

The deictic use of Je 'who/which' is possible only in restrictive relative clauses. The nature of this restriction on the deictic use of Je in non-restrictive clauses is that it becomes deictic only if it occurs before the head noun and never after the head noun. This may be shown in the following examples.

- (23) a. Je- meeTa amar bondhu, se esechilo
 who girl-the my friend she came
 'The girl who is my friend came'
- b. *meeTa, # Je amar bondhu, se esechilo
 girl-the who my friend she came
 'The girl, who is my friend, came'

Je 'who' is determinative or deictic¹ in (23a) as it has definitive use before the head noun meeTa 'the girl', whereas, Je 'who' is separated from the head noun with a comma intonation and occurs as a relative pronoun. This fact shows clearly that when Je 'who' precedes the head noun it is deictic, but when it follows the head noun it loses its deictic role. However, when Je 'who' occurs after the head noun, a comma intonation must be shown, as without any pause no non-restrictive sentences can be formulated in Bengali as shown in (23b).

2.1.8 Headless Relatives

The derivation of headless relatives can be shown from two different sources. They can be derived either from the headed relatives through a deletion of head nouns or through a deletion of indefinite subjects. Headless relatives can be derived in Bengali in both ways as shown in (24).

- (24) a. Je lokTa boi porche, se amar bondhu
 who man-the book reading he my friend
 'Who the man is reading a book is my friend'
 ['The man who is reading a book is my friend']

á. Je/

1 Je 'who' is taken here as a deictic relative pronoun as it shows its locational (temporal) characteristics in the environment where it occurs before any noun with a close juncture.

- á. Je Ø boi porche, se amar bondhu
 who book reading he my friend
 'Who is reading a book is my friend'
- b. (i) æ kJon amar bondhu
 someone my friend
 'Someone is my friend'
- (ii) æ kJon esechilo
 someone came
 'Someone came'
- (iii) Je æ kJon esechilo, se amar bondhu
 who someone came he my friend
 'Someone who came is my friend'
- (iv) æ kJon, Je amar bondhu, se esechilo
 someone who my friend he came
 'Someone, who is my friend, came'

(24a) shows the derivation of headless relatives through a deletion transformation where the head noun [lokTa 'the man'] is deleted in (24á). (24b) shows a different kind of derivation of the headless relatives where the head is an indefinite subject (æ kJon 'someone') and it is deleted in the matrix sentence for a coreferential pronoun se 'he', whereas the relative clause retains the indefinite pronoun and inserts the relative pronoun (Je 'who') either before or after it. Sentences like (23b.i, 23b.ii) can also be embedded in a different way to show the derivation of headless relatives (cf.25).

- (25) Je amar bondhu, se esechilo
 who my friend he came
 'Who is my friend came'

(25) shows the derivation of a headless relative where both the indefinite pronouns are deleted for a relative pronoun and a correlative marker. The construction of a headless relative from an indefinite pronoun source is further illustrated in (26).

- (26) a. ami kichu kinechilam
 I something bought
 'I bought something'
- b. ami mouke kichu diechilam
 I Mou-to something gave
 'I gave something to Mou'
- c. kichu ami kinechilam ami mouke diechilam
 something I bought I Mou-to gave
- d. Ja ami kinechilam, ta mouke diechilam
 what I bought that Mou-to gave
 'What I bought I gave to Mou'

(26) shows the derivation of a headless relative clause from two independent sentences with their indefinite heads [kichu 'something'] which are deleted for the regular relative pronoun [Ja 'what'] and correlative marker [ta 'that']. The following discussion examines the different sources of constructing the headless relatives in Bengali.

The occurrence of headless relatives is very common in Bengali. Headless relative clauses have no antecedent or postcedent noun in surface structure, as illustrated by the distinction between (27a) and (27b).

- (27) a. Je-lokTa amader barite esechilo, se amader
 who man-the our house-to came he our
 protibesi
 neighbour
 'Who the man came to our house is our neighbour'
 ['The man who came to our house is our neighbour']
- b. Je Ø amader barite esechilo, se amader
 who our house-to came he our
 protibesi
 neighbour
 'Who came to our house is our neighbour'

In (27a), Je 'who' occurs preceding its postcedent lokTa 'the man' in a restrictive relative clause. After the dropping of the postcedent in (27b), we have an illustration of a headless relative clause. It is clear from the above examples, that if the postcedent is dropped from the restrictive clause it becomes a headless relative clause. The same effect can be shown when a relative clause follows its antecedent in non-restrictive relative clauses and becomes a headless relative after the dropping of the antecedent from the relative clause. This is shown in (28).

- (28) a. lokTa, Je amader barite esechilo, se amader
 man-the who our house-to came he our
 protibesi
 neighbour
 'The man, who came to our house, is our neighbour'
- b. Ø, Je amader barite esechilo, se amader
 who our house-to came he our
 protibesi
 neighbour
 'Who came to our house is our neighbour'

The headed relative clause with its antecedent (lokTa 'the man') is shown in (28a) and (28b) becomes headless relative after dropping the antecedent from the relative clause.

The above examples (27, 28) show that when a relative clause is headed (with an antecedent or a postcedent) it ^amay turn into a headless relative clause after dropping the head noun of the relative clause. Besides the dropping of head nouns, headless relatives show some restrictions in the distribution of the relative and correlative pronouns in their structures. Like headed relative clauses, either the relative clause or the matrix sentence can occur initially in the complex construction in headless relatives.

However, one major difference between sentences containing headless relative clauses and sentences containing headed relative clauses is that the former require the insertion of both relative and correlative pronoun. That is to say that there are no constructions involving a headless

relative clause in Bengali that correspond to the sentence [amar ækTa boi ache, Ja ammu kine dieche 'I have a book which my mother bought for me'], in which the correlative ta has not been inserted, but only the relative Ja. Thus *amar ache, Ja ammu kine dieche 'I have what my mother bought me' is not a grammatical sentence in Bengali. Sentences like this show headless structure with ta 'that' and Ja 'what' as the following: amar ta ache, Ja ammu amake kine dieche 'I have that what my mother bought for me'. However, sentences like this are not very common in Bengali. So, the usual pattern of a headless relative is that where it allows either the relative clause or the matrix sentence as the first clause with relative and correlative pronouns, as shown in the following.

- (29) a. Je amar bondhu, se esechilo
 who my friend he came
 'Who (is) my friend (he) came'
- b. amar bondhu Je, se esechilo
 my friend who he came
 'My friend who (is) (he) came'
 ['Who is my friend came']
- c. se esechilo, Je amar bondhu
 he came who my friend
 'He came who (is) my friend'
- d. amar bondhu se, Je esechilo
 my friend he who came
 'He (is) my friend who came'

- e. se amar bondhu, Je esechilo
 he my friend who came
 'He (is) my friend who came'

The above examples show a few possibilities for constructing headless relatives in Bengali, which can be explained in the following manner:

- (30) a. The initial clause in the headless relative may be either the relative clause (29a, b) or the matrix sentence (29c, d, e).
- b. Je can occur either initially (29a, c, d, e) or at the end of the headless relative clause (29b). When Je occurs at the end of the headless relative clause, the headless relative clause must occur as the initial clause (29b).
- c. se can occur either initially (29a, b, c, e) or at the end of the matrix sentence (29d). When se occurs to the end of the matrix sentence, the matrix sentence must occur before the headless relative clause (29d).
- d. Like the headed relative clause, either the first or the second sentence can embed the other in a headless relative clause.
- e. Headless relative clauses are constructed with both the relative pronoun (je and Jini 'who', Ja 'what') and the correlative marker (se and tini 'he', ta 'that') and neither of them can be deleted.

- f. The relative pronouns in headless relatives are less specific as the postcedent does not occur after relative pronouns (e.g. Je esechilo 'who came' (headless relative) is less specific than the restrictive relative clause Je lokTa esechilo 'who the man (the man who) came').

Headless relatives allow all the relative pronouns except the inanimate Je (e.g. Je 'who', Jini 'who', Ja 'what'). It should be mentioned here that the inanimate relative pronoun Ja 'what' can be freely inserted in headless relative clauses as it has restrictive occurrence in the headed relative clause with a postcedent. The inanimate relative pronoun Je 'what, that' cannot occur in headless relatives as Je needs a postcedent after it (e.g. Je boiTa tumi cao, ta tumi pabe 'you will get the book that you want' → *Je Ø tumi cao, ta tumi pabe 'you will get that you want'). The following examples are given to show the occurrence of different relative pronouns in headless relative clauses.

(31) a. Je khelche, se bhari dustu
 who playing he very naughty
 'Who is playing (he) (is) very naughty'

b. Je boi porche, se amar bondhu
 who book reading he my friend
 'Who is reading a book (he) (is) my friend'

(32) a. Jini dhumpan korchon, tini æ kJon bikkhato lekhok
 who smoking doing he a famous writer

'Who is smoking (he) (is) a famous writer'

- b. Jini maThe dourachchen, tini amader Dril sikkhok
 who field-in running he our Drill teacher
 'Who is running in the field (he) (is) our
 physical instructor'

- (33) a. Ja tumi cao, ta tumi pabe
 what you want that you get-will
 'You will get what you want'

- b. Ja pabe na, ta kæmon kore pete cao
 what get-will not that how doing get-to want
 ami buJhine
 I understand-not
 'I don't understand how you want what you don't
 expect'

- (34) a. Jara khelche, tara bhari dustu
 who-pl playing they very naughty
 'Who are playing (they) (are) very naughty'

- b. Jāra dhumpan korchen, tāra bikkhato lekhok
 who-pl smoking doing they famous writers
 'Who are smoking (they) (are) famous writers'

It becomes clear from the above examples that the structures of headless relatives are identical to those of the headed relatives, except for the absence of the head nouns. Note also the constraints on the occurrence of Ja 'what'; this occurs only after an antecedent (e.g. boiTa, Ja tumi caicho, ta tumi pabe 'The book, which you want,

will get that') but never in the relative clause with a postcedent (e.g. *Ja boiT*a* tumi caicho, ta tumi pabe 'You will get the book that you want'). The examples which are given above show the occurrence of the relative and the correlative pronouns in the same way as they occur in headed relative clauses (restrictive and non-restrictive relative clauses). The headless relative clauses also allow the relative clause with (31b, 32b) or without objects (31a, 32a) with Je and Jini. Ja does not allow any object after it, as Ja occurs as an indefinite object.

2.1.9 Stacked Relatives

In ordinary relative clauses, the clause which is embedded in the relative clause modifies the head noun. Occasionally, a head noun can be modified by several relative clauses, and the clauses are said to be stacked. Consider (35).

- (35) The expensive blue woollen jacket was bought
 by John from Jenners.

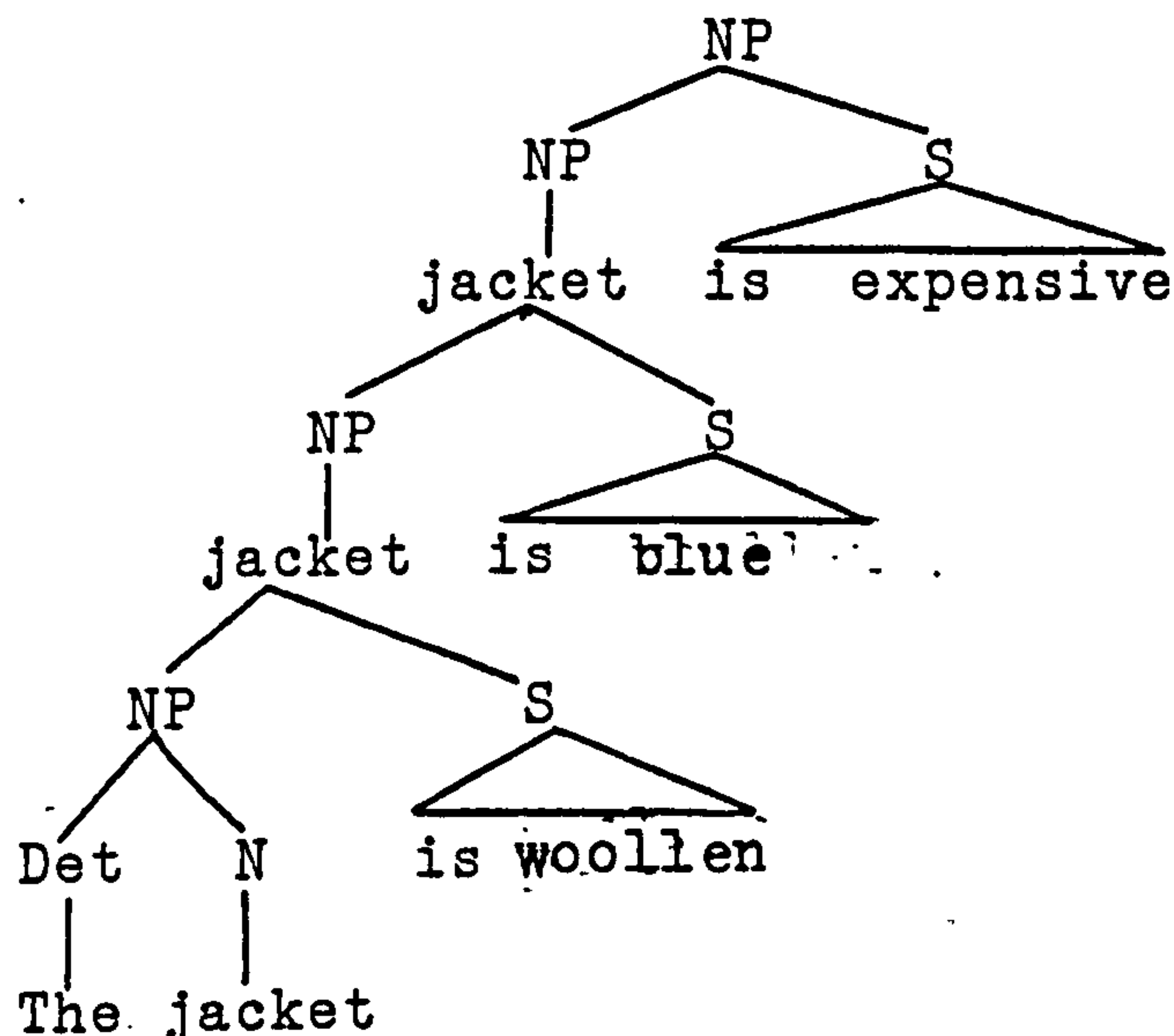
The head noun jacket in (35) is modified by three different clauses in the deep structure of the sentence which may be paraphrased in the following way:

- (35) a. The jacket is expensive
 b. The jacket is woollen
 c. The jacket is blue

The way the stacked relative is formed can be illustrated by the following example with its tree-diagram.

- (36) a. The jacket which was expensive blue and woollen was bought by John from Jenners.

b.



In (36a), jacket is the head noun of the relative clause, and is modified by three clauses and this process may further continue to modify the same head noun of the relative clause.

Stacked relatives are also common in Bengali relative clauses where the same structural process as shown for English, may be observed. The following examples are given to show the formation of stacked relatives in Bengali.

- (36) c. bhaddromohil, Jini sundori, bidusi, sikkhita,
 woman who pretty wise learned
 labonnomoyi hisebe poricita, tini amader
 charming reckoning known she our

bibhage Jogdan korechen

department-to joined has

'The woman, who is ~~reputed to be~~ a pretty, wise,
learned and charming has joined our department'

d. mæna, Je majamæ boro, nil cokher odhikari,
Moina who attractive large blue eye-of possessing
se amar bandhobi

she my girl-friend

'Moina, who has attractive blue eyes, is my girl-
friend'

In (36c), bhəddromohila 'woman' is the head noun and is modified by sundori 'pretty', bidusi 'wise', sikkhita 'learned' and labonnomoji 'charming'. In (36d), mæna 'Moina' occurs as the head noun of the relative clause which is modified by the first clause majamæ cokher odhikari 'has attractive eyes', the second clause which also modifies the same head noun in boro cokher odhikari 'has large eyes', which is already modified by the first clause, and the third clause which also modifies the same head noun in nil cokher odhikari 'has blue eyes'. The way the clauses modify the same head noun may be shown by paraphrase.

(37) a. [bhəddromohila sundori][bhəddromohila bidusi]

woman pretty woman wise

[bhəddromohila sikkhita][bhəddromohila labonnomoji]

woman learned woman charming

hisebe poricita]

reckoning known

b. bhaddromohila, [Jini sundori][bidusi][sikkhita]

woman who pretty wise learned

[labonnomoji hisebe poricita]

charming reckoning known

(38) a. [mœena majamœe cokher odhikari]

Moina attractive eye-of possessing

[mœena boro cokher okhikari]

Moina large eye-of possessing

[mœena nil cokher odhikari]

Moina blue eye-of possessing

b. mœena, [Je majamœe] [boro] [nil cokher odhikari]

Moina who attractive large blue eye-of possessing

The above examples show how stacked relatives are constituted in Bengali. In all the examples, the head nouns are shown which are modified by more than one clause in their deep structures. Examples like (37) and (38) show the stacking of relative clauses with adjectives modifying the head nouns. On the basis of the above examples, it can be said that the adjectives are derived from the relative clauses (39b) and the relative clauses are reduced to adjectives (39a). This can be shown in (39).

(39) a. sarita sundor ar dami

sari-the beautiful and expensive

'The sar is beautiful and expensive'

- á. sariTa, Ja sundor ar dami ...
 sari-the which beautiful and expensive
 'The sari which is beautiful and expensive'
- b. sariTa, Ja sundor ar dami ...
 sari-the which beautiful and expensive
- ḃ. se sundor ar dami sari kinechilo
 she beautiful and expensive sari bought
 'She bought a beautiful and expensive sari'

The construction of any sentence may be extended by the addition of three or four clauses or even more. The following example shows the head noun is modified by as many as six relative clauses.

- (40) boita, Ja lal, b3ro, dami, sundor, notun
 book-the which red large expensive beautiful new
 ar bādhano, seTa mouer
 and bound that Mou-of
 'The book which is red, large, expensive, beautiful,
 new and bound belongs to Mou'

It is clear from the above discussion that a relative clause can be taken as stacked when it is attached to the head noun and which may have one or more relative clauses in the sentence next to it. The relative clauses modify the head noun one after another. So the modification of the right hand clauses next to the head noun follow one after and stacking of relative clauses takes

place in the sequential order. The following examples are given to show the stacking of clauses with no relatives in surface structure; these are followed by stacked relative clauses and their paraphrases.

(41) a. selinar dirgho sukhi dampotto Jibon sɔbaike
Selina's long happy conjugal life all-to
poritripto koreche

satisfied has

'The long happy conjugal life of Selina has
satisfied to all'

á. selinar dampotto Jibon, Ja chilo dirgho ar
Selina's conjugal life which was long and
sukhi, ta sɔbaike poritripto koreche
happy that all-to satisfied has

'The conjugal life of Selina, which was long and
happy, has satisfied to all'

ǎ. selinar dampotto Jibon chilo dirgho ar sukhi
Selina's conjugal life was long and happy
'The conjugal life of Selina was long and happy'

b. Dresinȝ Tebiler opore baro inci dirgho
dressing table's on twelve inches long
lal cine kagocer pakhaTa bes dami
red Chinese paper-of fan-the quite expensive
'The twelve inches long red Chinese paper fan on
the dressing table is quite expensive'

ǎ. Dresinȝ Tebiler oporer pakhaTa, Ja baro inci
dressing table on-the fan-the which twelve inches

dirgho lal cine kagocer, ta bes dami
 long red Chinese paper-of that quite expensive
 'The fan (is) on the dressing table, which is
 twelve inches long and made of Chinese paper, is
 quite expensive'

6. pakha Ja baro inci dirgho, Jar
 fan which twelve inches long which-of
 rang lal, Ja cine kagoc die toiri, ja
 colour red which Chinese paper-of made which
 Dresin Tebiler opore ache
 dressing table's on is
 'The fan which is ten inches in length, which is
 red in colour, which is made of Chinese paper,
 which is on the dressing table'

The two examples which are given in (41), show different structures of stacked relative clauses (41a, b). (41a) and (41b) are given to show the paraphrases of the stacked relative clauses. Both in (41a) and (41b), the head nouns of the stacked relative clauses are non-human (Jibon 'life' in (41a) and pakha 'fan' in (41b)). Stacking of relative clauses show recursion in the structure and the recursive process allows to generate an infinite number of relative clauses to modify the same head noun (cf.42).

- (42) bariTa, Ja chilo[bondorer kache][sākor pare]
 house-the which was port-of near culvert-of near

[narkol gacher nice][Dhibir opore][b̥ro rastar dhare]
 coconut tree-of under mound-of on high way-of near
 [girJar b̥ã dike][Jomidar barir kache], ta æ khon
 church-of left side zemindar house-of near that now
 silpo-k̥ola æ kaDemir s̥mpotti
 Fine-Arts Academy's property
 'The house, which was near the port, by the culvert,
 under the coconut tree, on the mound, near the high
 way, left to the church, near the Landlord's house,
 is now the property of the Fine Arts Academy'

2.1.10 Embedding

Embedding is a process of syntactic subordination in which one sentence is inserted into another. In Bengali relativization there is both regular embedding and also partial embedding, where the subordinated sentence is not completely embedded in the main sentence. Partial embedding occurs in restrictive relative clauses, complete embedding in non-restrictive relatives. The following examples show complete and partial embeddings in Bengali relative clauses.

(43) Complete Embedding

- a. bh̥ddrolok boi porchen
 gentleman book reading

'The gentleman is reading a book'

- b. bh̥ddrolok bhasat̥tter oddhapok
 gentleman Linguistics-in teacher

'The gentleman is a teacher in Linguistics'

c. bhəddrolok[bhəddrolok bhasatɔtter oddhapok]

gentleman gentleman Linguistics-in teacher

boi porchen

book reading

d. bhəddrolok[Jini bhasatɔtter oddhapok],tini boi

gentleman who Linguistics-in teacher he book

porchen

reading

'The gentleman, who is a teacher in Linguistics,
is reading a book'

e. bhəddrolok[Jini boi porchen], tini bhasatɔtter

oddhapok

'The gentleman, who is reading a book, is a
teacher in Linguistics'

(44) Partial Embedding

a. bhəddrolok boi porchen

'The gentleman is reading a book'

b. bhəddrolok bhasatɔtter oddhapok

'The gentleman is a teacher in Linguistics'

c. bhəddrolok[bhasatɔtter oddhapok] boi porchen

gentleman Linguistics-in teacher book reading

d. Ø[Je bhəddrolok bhasatɔtter oddhapok]tini boi

who gentleman Linguistics-in teacher he book

porchen

reading

'Who the gentleman is a teacher in Linguistics is
reading a book'

[The gentleman who is a teacher in Linguistics is
reading a book']

e. Ø[Je bhəddrolok boi porchen], tini bhasatətter
who gentleman book reading he Linguistics-in
oddhapok
teacher

'Who the gentleman is reading a book is a teacher
in Linguistics'

['The gentleman who is reading a book is a teacher
in Linguistics']

The complete and partial embeddings of simple sentences are shown in the above sentences. The simple sentences are illustrated in (43a, b) and (44a, b) and the embedding process is shown in (43c, d, e) and (44c, d, e). (43d) shows the embedding of the first sentence into the second and (43e) of the second sentence in the first. Sentences like (44c, d) do not show complete embedding, the one sentence being only partially embedded into the other after the deletion of the identical head noun from the matrix sentence. (44e) shows the partial embedding where the head noun bhəddrolok 'gentleman' is deleted in the second sentence for a coreferential pronoun (tini 'he'). (44d) shows the embedding of the first sentence into the second, and in (44e) the first sentence is moved to the place of the second sentence and the head noun is deleted for a

coreferential pronoun.

The way sentences are embedded can also be explained through syntactic process. The relativized NP can occur initially, medially or finally in a complex structure of sentences. Following Kuno (1974) it can be said that embedding can be either left-embedding, centre-embedding, or right-embedding, and all three types are equally possible in Bengali relative clauses. According to Kuno (1974: 118) centre-embedding in SOV languages reduces the comprehensibility of sentences. This does not necessarily apply to Bengali, which is also a SOV language, but where centre-embedding, like left- and right-embedding of clauses, does not reduce comprehensibility. Consider the following examples.

2.1.10.1 Left-Embedding

(45) [Je cheleTa esechilo], se amar bondhu

who boy-the came he my friend

'Who the boy came is my friend'

['The boy who came is my friend']

In (45), the relative clause Je cheleTa esechilo 'The boy who came' is left-embedded in the matrix sentence se amar bondhu 'He is my friend'. This sort of embedding is found only in deictic clause.

2.1.10.2 Centre-Embedding

(46) cheleTa, [je esechilo], se amar bondhu

boy-the who came he my friend

'The boy, who came, is my friend'

The above example shows that centre-embedding is equally possible in relative clauses in Bengali. (46) shows centre-embedding neatly. Je esechilo 'who came' in (46) is centre-embedded in the matrix sentence cheleTa amar bondhu 'The boy is my friend'. Centre-embedding is found only in non-restrictive relative clauses.

2.1.10.3 Right-Embedding

(47) durghoTonae gɔtokal mara gæ che se lokTa,
 accident-in yesterday died has he man-the
 [Je anur bikkri korto]
 who grapes sold
 'The man has died yesterday in accident who used to
 sell grapes'

It is clear from the above example that right-embedding is also possible in Bengali where the matrix sentence precedes the relative clause. In (47), Je anur bikkri korto 'Who used to sell grapes' is right-embedded in the matrix sentence durghoTonae gɔtokal mara gæ che lokTa 'The man has died yesterday in accident'.

2.2 Noun Phrase Accessibility

2.2.1 The Position of the NP

Relative clauses occur in different positions in a complex sentence. It is important to show actual distributions of relative clauses and how they differ with respect to which NP positions can be easily relativized. From this standpoint the function of the noun phrase plays an important role in relativization. Keenan and Comrie's (1977, 1979a, 1979b) Noun Phrase Accessibility Hierarchy deals with the modification of noun phrases by relative clauses. Their study essentially is based on semantic definition of relative clause. They (1977: 63-64) give the following definition of the restrictive relative clause:

"We consider any syntactic object to be an RC if it specifies a set of objects (perhaps a one-member set) in two steps: a larger set is specified, called the domain of relativization, and then restricted to some subset of which a certain sentence, the restricting sentence, is true. The domain of relativization is expressed in surface structure by the Head NP, and the restricting sentence by the restricting clause, which may look more or less like a surface sentence depending on the language."

Distinguishing different RC-forming strategies, they propose three Hierarchy Constraints (1977:67). This can be explained in the following example:

(48) the book that Robin likes

The relative clause is shown in (48), where the book is the head noun of the relative clause, Robin likes is the Restricting clause; Robin likes it is the Restricting sentence in their deep structures. Relative clause forming strategies depend on the place of occurrence of the restricting clause and may be Prenominal, Postnominal, or Internal. If the restricting clause occurs before the head noun it exemplifies the Prenominal Strategy. If the relative clause occurs after the head noun it exemplifies the Postnominal Strategy, whereas, in the case of Internal Strategy, the Restricting clause itself contains the head noun.

A relative clause can be formed in various ways depending on the positions of the head nouns in a relative clause and whether the clause is restrictive. The three strategies (i.e. prenominal, postnominal and internal) of forming relative clauses are found in Bengali, though the prenominal and postnominal strategies are more common than the internal relative clause strategy. In Colloquial Bengali, pre- and postnominal relative clauses are common. The following examples will show the three different strategies of forming relative clauses as mentioned by Keenan and Comrie.

(49) a. Postnominal Relative Clause Strategy

lokTa, Je tas khelche, se amader protibesi
 man-the who cards playing he our neighbour
 'The man, who is playing cards, is our neighbour'

b. Prenominal Relative Clause Strategy

Je tas khelche, se lokTa amader protibesi
who cards playing he man-the our neighbour

'Who is playing cards the man is our neighbour' (lit)

['The man who is playing cards is our neighbour']

c. Internal Relative Clause Strategy

ami Je duTo putul kinechilam, ta mouke
I which two doll bought that Mou-to
diechi
given-have

'I have given two dolls to Mou which I bought' (lit)

['The two dolls which I bought I have given to Mou']

The head noun lokTa 'the man' occurs before the relative clause in (49a) and shows the postnominal occurrence of the relative clause Je tas khelche 'who is playing cards'. The relative clause Je tas khelche 'who is playing cards' occurs before the head noun lokTa 'the man' in (49b) showing the prenominal use of the relative clause. In internal relative clause strategy the head noun putul 'doll' occurs inside the relative clause ami Je duTo putul kinechilam 'the two dolls which I bought' in (49c). The NP of the matrix sentence dominates the internal clause shown in (49c). (49c) shows that the internal clause is preceded by ami Je duTo 'I which two' and it is followed by kinechilam 'bought' which are non-null elements in the sentence. It should be mentioned here that as the relative

pronoun may occur either before or after the head noun, it becomes difficult sometimes to show different strategies of forming relative clauses in Bengali. From this perspective, the examples which are given in (49) to outline different strategies, it can be said that the Postnominal Relative Clause Strategy is defined here when the antecedent occurs before the relative clause (49a), the Prenominal Strategy is defined when the antecedent occurs in the matrix sentence after the coreferential pronoun following the relative clause (49b). The Internal Strategy is defined where the antecedent usually occurs after the relative pronoun in a deictic relative clause. This strategy shows the occurrence of the head noun inside the relative clause.

2.2.2 Accessibility Hierarchy

To establish a Universal hierarchy Keenan and Comrie (1977:66) have proposed the Accessibility Hierarchy (AH) to state the dependency relationship of the NP positions for different languages. The Accessibility Hierarchy interprets the relative clause formation strategy, which allows relativization of all positions from left to right. This may be discussed in relation to a set of Hierarchy Constraints. The three Universal Conditions stated by them are:

(50) a. A language must have a primary relative clause

forming strategy. This strategy indicates that a language must be able to relativize a subject.

- b. If any language is able to apply the primary relativization strategy to any lower position, then (as indicated above) it is capable of relativizing the higher positions also. This relativization strategy indicates that any Relative Clause Formation Strategy is applicable to a continuous segment of the Accessibility Hierarchy.
- c. A primary relativization strategy that is applicable to one point of the Accessibility Hierarchy may cease when applied to any lower point.

In the case of Bengali, the first condition (50a) is satisfied. All noun phrases in subject position can be relativized.

The second constraint states that if any given relative clause forming strategy can apply to object of Comparison, Genitive NP, Oblique Object and indirect object or to all lower positions of the strategy, then it can also apply to direct object and subject. All the positions of the Hierarchy Constraint are directly applicable to Bengali to relativize all positions.

The third constraint can be ignored for Bengali as all the positions of the Hierarchy Constraint are easily

accessible to it and there is no cut off point for any NP position.

The Accessibility Hierarchy outlined by Keenan and Comrie (1977) shows six NP positions, and these can be relativized directly in Bengali. According to this hierarchy, the NP in the left position is easier to relativize than any NP position to its right. The NP positions that are shown in between the leftmost and rightmost NPs are taken as the cut off points for a primary strategy of any language. The way they present the Accessibility Hierarchy is as follows:

(51) Accessibility Hierarchy:

SU > DO > IO > OBL > GEN > OCOMP

[< is used to show the relatively more accessible items in a sentence,

SU: Subject; DO: Direct Object; IO: Indirect Object; OBL: Major Oblique Case NP; GEN: Genitive; OCOMP: Object of Comparison]

On the basis of the above Accessibility Hierarchy (51), the following examples can be stated after showing the constituent orders of the head nouns in a sentence which constitute relative clause.

2.2.2.1 Subject Relativization

- (52) a. bhəḍromohohila, Jini gan gaichen, tini naritte
 woman who song singing she women-lib-
 bissasi
 in believe
 'The woman, who is singing, believes in women's
 liberation'
- b. amar bondhu, Jini sahittik, tini kəleJer
 my friend who writer he College-in
 oddhapok
 teacher
 'My friend, who is a writer, is a college teacher'

2.2.2.2 Direct Object Relativization

- (53) a. məna mach rādche, Ja mou khete bhalobase
 Moina fish cooking which Mou eat-to likes
 'Moina is cooking fish which Mou likes to eat'
- b. məna boi porche, Ja mou səkale
 Moina book reading which Mou morning-in-the
 kineche
 bought-has
 'Moina is reading a book which Mou has bought in
 the morning'

The strategy of relativizing the direct object is shown in (53a) and (53b). mach 'fish' and boi 'book' occur as direct

objects in the above examples and are retained as the head nouns in the matrix sentences, whereas they are replaced in the relative clauses for the relative marker Ja 'which'.

2.2.2.3 Indirect Object Relativization

The indirect object usually occurs before the direct object in Bengali though it may be placed after the direct object in literary style. The following examples are given to show the relativization of the indirect object.

- (54) a. meeTa, Jake ami boi diechilam, se amar
 girl-the whom I book gave she my
 sshopaThi
 class-mate
 'The girl to whom I gave the book is my class-mate'
- b. lokTa, Jake mæna Taka dæ e, se gorib bæ bosaji
 man-the whom Moina money gives he poor businessman
 'The man to whom Moina gives money is a poor
 businessman'

The relativizing of the indirect object is shown in the above examples. The head nouns meeTa 'the girl' and lokTa 'the man' occur as the indirect objects in (54a) and (54b) which are replaced in the relative clause with Jake 'whom'.

2.2.2.4 Oblique Object Relativization

Keenan and Comrie (1977:66) define major oblique cases as those noun phrases which 'express arguments of the main predicate'. The following examples may be given from Bengali where arguments of the main predicate are expressed by noun phrases.

- (55) a. mou Je almarir moddhe boi rekhechilo, ta
 Mou that almirah-of in book put that
 bhege gæ che
 broken has
 'The almirah in which Mou put books has broken'

In (55a), almarir 'almirah' is used to show the oblique case head noun which in turn expressed an argument of the main predicate in the sentence. almarir 'almirah' occurs as the head noun which is replaced by the inanimate relative pronoun ta 'that' in the matrix sentence. It should be mentioned here that the locative and comitative NPs can also be introduced here to show the relativization of oblique NPs. This may be relativized with other lexical items which are used in place of the inanimate relative pronouns. The following examples are shown to illustrate the relativization of locative and comitative NPs.

- (55) b. Locative NP

i. [meJhe [meJhete ami bosechilam]] dhulote
 floor-on floor-on-the I sat dust-with

bhorti

covered

- ii. [meJhe [Jekhane ami bosechilam]ta dhulote bhorti]
 floor where I sat which dust-with covered
 'The floor where I sat was covered with dust'

c. Comitative NP

lokTa, Jar songe ami postTophise giechilam, se
 man-the whom with I post office went he
 amar bondhu
 my friend

'The man, with whom I went to post office, is my
 friend'

The way a locative NP is relativized is shown in (55b) where the head NP meJhe 'floor' is replaced with a non-relative marker (not a regular relative marker) Jekhane 'where' in the relative clause. Like the usual relative sentence pattern, the correlative marker ta 'which/that' is used in the matrix sentence after the head noun.

Sentence (55c) shows the Comitative NP relativization where the head noun lokTa 'the man' is replaced with the relative marker Jar 'whom'. Like (55b), (55c) also shows the coreferential use in the matrix sentence. These examples show that the Locative NPs can be relativized without the regular relative markers in Bengali.

It should be mentioned here that though Jekhane 'where' (exemplified in (55b)) and Jokhon 'when' are not

true relative words. The structural patterns of these words show the deictic use of Bengali relatives. Jekhane 'where' can also be interpreted as Je + khane 'which + place' and Jokhon 'when' can be interpreted as Jô + khon 'which + time'. The structure of these words shows that when the inanimate relative pronoun Je 'which/that' is added as a prefix with some other inanimate nouns, they are capable of functioning as relative pronouns. tôkhon 'then' correlative can also be analyzed in the same way as its structure shows the deictic use against Jokhon 'when'. tôkhon 'then' shows the structural pattern as tô + khon 'that + time'. khon 'time' is used in Bengali as an independent word.

2.2.2.5 Genitive NP Relativization

- (56) a. mœena, Jar sari ami dhar korechilam, se amar
 Moina whose sari I borrow did she my
 purono bandhobi
 old friend
 'Moina, whose sari I borrowed, is my old friend'
- b. mou, Jar putul ami niechilam, se amar
 Mou, whose doll I took she my
 sôhopaThi
 class-mate
 'Mou, whose doll I took, is my class-mate'

In the above examples mœena and mou are shown as the head

nouns in the matrix sentences, whereas the identical nouns are deleted in the relative clauses and were replaced with the genitive relative marker Jar 'whose' and se 'she' show the coreferentiality of the deleted noun phrases.

2.2.2.6 Relativization of Object of Comparison

- (57) a. mɛna, Jar cee mou lɔmba, se kɔlejer
 Moina whose than Mou tall she college-of
 oddhapika
 teacher
 'Moina, than whom Mou is taller, is a teacher of
 the college'
- b. bariTa, Jar cee gachTa choTo, ta amader
 house-the which than tree-the short that ours
 'The house, than which the tree is shorter, is
 ours'

The object of comparison in (57a) is mɛna 'Moina', with whom 'Mou' is compared; in (57b) it is bariTa 'the house', with which gach 'tree' is compared. mɛna and bariTa are the head noun phrases which are replaced in the relative sentence by Jar 'whose' and Jar 'of which'.

2.2.3 Relative Clause Forming Strategy

Keenan and Comrie (1977: 67-95) state three rules for Hierarchy Constraints (HCs) and later describe the

Primary Relativization Constraint (PRC). They show the Relative clause Forming Strategies of selective languages with their relativizable positions. Bengali is not included in their discussion; however, Hindi, which is a sister language of Bengali, is included. It should be mentioned here that though Bengali and Hindi are cognate languages, their syntax and morphology differ in many respects. After following the system outlined by Keenan and Comrie, the following table can be made for Bengali to show its relative clause forming strategy and relativizable positions.

(58) Relative Clause forming Strategy | Relativizable positions

	Sub	IO	DO	Obl	Gen	OCOMP
1. Prenom, + Case	+	+	+	+	+	+
2. Postnom, + Case	+	+	+	+	+	+
3. Internal, + Case	+	+	+	+	-	+

The relative clause forming strategies with their relativizable positions which are shown in (58) can be elaborated with the following examples.

2.2.3.1 Prenom, + Case

(59) a. Subject Position:

sɔkalbæ lae Je esechilo, se meeta cole gæ che .
morning-in-the who came she girl-the left-has

'Who came in the morning she the girl has left'
 ['The girl who came in the morning has left']

b. Direct Object Position:

tumi Jake dekhechile, se meeta amar bandhobi
 you whom saw she girl-the my friend
 'Whom you saw the girl is my friend'
 ['The girl whom you saw is my friend']

c. Indirect Object Position:

ami Jake boi diechilam, se meeta amar bandhobi
 I whom book gave she girl-the my friend
 'The girl to whom I gave the book is my friend'

d. Oblique Case NP Position:

mou Jekhane anTi rekheche, se baksoTa dekhte
 Mou where ring put-has that box-the look-to
 sundor
 beautiful
 'Where Mou has put the ring, that box looks
 beautiful' (lit).
 ['The box that Mou has put the ring in looks
 beautiful']

e. Genitive NP Position:

ami Jar boi dhar korechilam, se mou amar
 I whose book borrowed she Mou my
 bandhobi
 friend

'Whose book I borrowed she Mou is my friend' (lit)
 ['Mou whose book I borrowed is my friend']

f. Object of Comparison Position:

Jar cee mou lɔmba, se meeTa anitar bon
 whom than Mou tall she girl-the Anita's sister
 'The girl whom Mou is taller than is Anita's
 sister'

2.2.3.2 Postnom,+ Case

(60) a. Subject Position:

sɔkalbæ lae meeTa, Je esechilo, se cole gæ che
 morning-in the girl-the who came she gone-has
 'The girl who came in the morning has left'

b. Direct Object Position:

meeTa æ kTa bɔl kineche, Ja dekhte
 girl-the a ball bought-has which look-to
 sundor
 beautiful
 'The girl has bought a ball which looks beautiful'

c. Indirect Object Position:

ami meeTa, Jake boi diechilam, se amar bandhobi
 I girl-the whom book gave she my friend
 'The girl whom I gave the book is my friend'

d. Oblique Case NP Position:

ami bakso, Jar bhetore anTi rekhechilam, seTa
 I box which in ring put that
 notun
 new

'The box in which I put the ring is new'

e. Genitive NP Position:

dokaner malik, Jār rāmnāe æ kTa dokan ache,
 shop's owner whose Ramna-in a shop has
 tini bes bhōddro
 he quite gentle

'The shop's owner, whose shop in the Ramna, is
 quite gentle'

f. Object of Comparison Position:

meeTa, Jar cee mou lōmba, se anitar bon
 girl-the whom than Mou tall she Anita's sister
 'The girl whom Mou is taller than is Anita's
 sister'

2.2.3.3. Internal, + Case

(67) a. Subject Position:

ciriakhanae Je horinTa ache, ta sundorbon
 zoo-in which deer-the is that Sunderban
 theke ana
 from brought

'The deer which is in the zoo was brought from
Sunderban'

b. Direct Object Position:

mɔena Je boiTa notun, ta porchilo
Moina that book-the new that reading-was
'Moina was reading the book which was new'

c. Indirect Object Position:

mɔena a e kTa boi mou Jake diechilo, se tar
Moina a book Mou whom-to gave she her
bandhobi
friend

'Moina gave a book to Mou who was her friend'

['Mou, to whom Moina gave a book, was her friend']

d. Oblique NP Position:

mou Je bakser moddhe anTi rekheche ta dekhte
Mou which box-of in ring put-has that look-to
sundor
beautiful

'The box that Mou has put her ring in looks
beautiful'

e. Object of Comparison Position:

Je meeTar cee mou lɔmba, se anitar bon
who girl's than Mou tall she Anita's sister
'The girl whom Mou is taller than is Anita's
sister'

The above examples which are illustrated to show the relative clause forming strategies and relativizable positions underlined by Keenan and Comrie (1977). These clearly show that the relativizable NPs in Bengali can occur in any of the three strategies outlined by Keenan and Comrie, i.e. prenominal, postnominal, and internal. It allows all the relativizable positions proposed by them. It should be mentioned here that there is some difficulty in applying the model in Bengali, as the head noun may either be in the relative clause along with the relative pronoun or in the matrix sentence along with the correlative or the minor pattern in the matrix sentence without the correlative. The occurrence of head nouns in internal clause which is illustrated in (61) shows that the internal NPs may occur either before or after the head nouns. From the above circumstance of the occurrence of head nouns in Bengali relative clauses, I am defining internal position of head nouns which occurs either before or after the relative pronouns and the internal clause becomes like the following: ami æ kTa horin dekhechilam (I a deer saw) 'I saw a deer', where the internal NP horin 'deer' occurs after the subject and before the verb and the relative pronoun may occur either before or after horin (cf.49c).

2.2.4 Recent Studies by Keenan and Comrie

Later Keenan and Comrie (1979a) gave further exemplification of the Accessibility Hierarchy, commenting in particular on the relative clause formation strategy in Hindi. In the first place, Hindi forms relative clauses where the head NP is placed to the left of the restricting clause and the restricting clause is introduced by a relative pronoun. In this case, both the NPs and the restricting clause use the same postposition. The relative clause may occur either to the left or to the right of the main verb. Keenan and Comrie (1979a:338) cite an example which occurs to the right of the main verb. It should be mentioned here that Bengali may form relative clauses by the same process; but though it has the same structure as Hindi, with postpositions after the noun, it differs considerably from Hindi in other respects. To make the comparison and to illustrate the relative clause forming strategy described by Keenan and Comrie, similar sentences are given here to show the rule for Bengali and Hindi (the examples for Hindi are from Keenan and Comrie).

(62) a. Bengali

mithun sei churiTa dekhechilo, Ja die oi
 Mithun that knife saw which with that
 lokTa murgi keTechilo
 man-the chicken killed
 'Mithun saw the knife with which the man killed
 the chicken'

b. Hindi

ram ne us caakuu ko dekhaa Jis se us

Ram SU that knife DO saw which Inst that

aadmi ne murgi ko maaraa thaa

man SU chicken DO killed

'Ram saw the knife with which the man killed the chicken'

The main difference is that in Bengali no postpositions follow the nouns (Mithun, knife, chicken).

Keenan and Comrie (1979a:338) have also shown another relative clause forming strategy for Hindi, where the head NP occurs in the NP_{rel} (where the head noun is replaced by a relative pronoun) position and the matrix sentence follows the restricting clause. This type of relative clause forming strategy is also found in Bengali. The examples for Bengali and Hindi are given here to show the contrast (the example for Hindi is taken from Keenan and Comrie).

(63) a. Bengali

lokTa Je churi die murgi keTechilo

man-the which knife with chicken killed

ta/seTa mithun dekhechilo

that Mithun saw

'Mithun saw the knife with which the man killed the chicken'

b. Hindi

aadmii ne Jis caakuu se margi ko maaraa thaa,
 man SU which knife Inst chicken DO killed
 us caakuu ko ram ne dekhaa
 that knife DO Ram SU saw
 'Ram saw the knife with which the man killed the
 chicken'

The similarities between Bengali and Hindi is that ta/seTa 'that' is used as a coreferential element for churi 'knife' in Bengali, which is retained in Hindi. Instead of using the coreferential element ta/seTa 'that', the head noun churi 'knife' may be used in Bengali, as in Hindi, but this is not common.

Keenan and Comrie's (1977, 1979a, 1979b) Noun Phrase Accessibility Hierarchy is based on the traditional approach of grammatical theory. The only difference is that they have made the rules more explicit.

2.2.5 Maxwell's Proposal

Maxwell (1979) has also proposed new formulations of strategies of Relativization and NP Accessibility, following Givón (1975). In his approach, he has modified and extended the strategies proposed originally by Givón (1975). Givón's account of relative clause forming strategies is a sort of functional classification and is based on surface structure properties of a language and is

not entirely different from Keenan and Comrie's. His proposed strategies are based on the following distributional order: Word Order Strategy (WO-S), Gap Strategy, Anaphoric Pronoun Strategy (Pro-S), Relative Pronoun Strategy (Rel-S), and the Non-Reduction Strategy (NR-S). Though Givón also uses the Postnom and Prenom positional criteria, his NP_{rel} does not appear in the restricting clause. However, some of the formulations of strategies proposed by Maxwell are identical to Keenan and Comrie's. Maxwell's (1979:359) NR-R is synonymous with Keenan and Comrie's Internal (+ Case) Strategy. The only difference between Maxwell's and Givón's is that the latter's classification is based on surface structure properties, while the former has included transformational devices like deletion (for WO-S), pronominalization (for Pro-S), combination of movement and transformation (for Rel-S). The way the formulations differ may be stated in the following diagram, following Maxwell (1979:364).

(64)

	Keenan & Comrie	Givón-Maxwell	Transformational
Bengali	Inter + Case	NR-S	Base-generated

Givón's case-coding strategy may be stated for Bengali in the following manner:

(65)

	Relative Clause-Forming Strategy	Relativizable Positions					
		SU	IO	DO	OBL	GEN	OCOMP
Bengali	1. Rel-S	+	+	+	+	+	+
	2. NR-S	+	+	+	+	+	+

This approach to relative clause forming strategies is, like Keenan and Comrie's, readily applicable to Bengali.

Keenan and Comrie (1979b) have responded to Maxwell's (1979) criticism of their Hierarchy Accessibility. In their latest discussion (1979b:651), they give what they call a 'strong form' of the AH constraint. Two positions have been stated in their discussion which may be repeated here:

- (66) a. A language can relativize all higher positions if any position on the Accessibility Hierarchy can be relativized.
- b. A language can relativize position X on the Accessibility but not any positions lower than X.

Their relativizing strategies are based on both the restricting clause and the NP (1979b:656): if a restricting clause precedes the head NP it will be regarded as an

instance of prenominal strategy, if it follows the head NP it will be taken as an instance of postnominal strategy, and it will be regarded as an instance of internal strategy if it contains the head NP. Maxwell's analysis is based on a Word Order Strategy (WO-S), a Relative Pronoun Strategy (Rel-S), and a Personal Pronoun Strategy (Pro-S). Maxwell's WO-S is very close to Keenan and Comrie's -Case strategy. So, their strategies differ only from Maxwell's Rel-S and Pro-S strategies.

This study explains the noun phrase accessibility hierarchy proposed by Keenan and Comrie and shows its application to Bengali. Maxwell's approach is not employed as it is still undeveloped.

2.2.6 Other Works

Cole et al (1977) have discussed different constraints which deal with noun phrase accessibility on Island Constraints proposed by Ross (1967) and Perlmutter (1972), which state that island constraint is applicable to relativization, if it involves any kind of deletion or movement rules, otherwise it will not be applicable to any language. Cole et al apply the Island Constraint to several languages and show that the possibilities for relativization are determined by whether deletion or movement is involved. However, "Noun Phrase Accessibility and Island Constraints" explained by Cole et al have not

been included in the present discussion as similar rules are discussed elsewhere in the present dissertation. (Cf. 6.4.6.3 - 6.4.6.4 where rules of Complex NP and Sentential Subject are described).

It should be mentioned here that the Noun Phrase Accessibility Hierarchy proposed by Keenan and Comrie does not account for all the complex structures to be found in natural languages. Relevant papers are, e.g. Yeoh's (1977) study on Bahasa Malaysia (national language of Malaysia), which shows that the language does not allow all relativizable positions outlined by Keenan and Comrie. Dik (1980: 113) has shown that ergative languages like Dyirbal show the difficulty of applying the NP Accessibility. Cinque (1981:306) has proposed the following revised version of the NP Accessibility:

(67) Subject > Direct Object > Predicate NP > Temporal
Adverbial > Indirect Object > Oblique Object > Genitive >
Object of Comparison.

It should be mentioned here that all these positions (67) are accessible to relativization in Bengali.

CHAPTER THREE

Elements of Relative Pronouns

3.0 Introductory

A relative clause can be constituted with a relative pronoun, the antecedent or the postcedent along with some other elements like determiners, other nouns besides the head noun, adjectives and so on. The relative clause is constituted with an initial wh-element either before or after the head noun and the coreferential pronoun occurs initially in the matrix sentence. Bengali has more than one relative pronoun and these vary on the dimension of honorific and non-honorific, singular and plural, human, nonhuman, animate and inanimate. The relative-correlative construction of Bengali is very regular and shows a structural contrast with many related and unrelated languages. In the following section, a detailed discussion is made of the relative pronouns, antecedents, postcedents and determiners which play a major role in constitution of relative clauses in Bengali.

3.1 Relative Pronouns

There are three relative pronouns in Bengali, the human Je 'who', with its honorific Jini, for [+ human] nouns, Je 'what, that, which' for $\left[\begin{smallmatrix} -\text{human} \\ +\text{animate} \end{smallmatrix} \right]$ nouns, and Ja 'what,

that, which' for [-animate] nouns. They agree with the verb in number and the human Je 'who' makes the distinction with its honorific counterpart Jini 'who'. The personal pronouns in Bengali show three distinctions for second person and two distinctions for third person. Second person combines with honorific, non-honorific and neutral [apni 'you' (honorific), tumi 'you' (neutral), tui 'you' (non-honorific)], and third person combines with honorific and neutral [tini 'he' (honorific), and se 'he' (neutral)]. The following examples show the relative pronouns that are used in Bengali.

- (1) a. Je 'who' } : human and neutral
 Jini 'who' } : human and honorific
- b. Je 'what, that, which' : $\begin{bmatrix} \text{-human} \\ \text{+animate} \end{bmatrix}$
- c. Ja 'what, that, which' : -animate

3.1.1 Je 'who' : human and neutral

- (2) a. Je cheleTa amader barite esechilo, se amar
 who boy-the our house-to came he my
 bondhu
 friend
 'Who the boy came to our house is my friend'
 ['The boy who came to our house is my friend']
- b. amader barite Je cheleTa esechilo, se amar
 our house-to who boy-the came he my

bondhu

friend

'Who the boy came to our house is my friend'

['The boy who came to our house is my friend']

The above examples show the occurrence of Je in initial and medial position in restrictive relative clauses. (Remember that in such clauses the relative pronoun precedes the head noun). Je can be used after the head noun in non-restrictive relative clauses as in (2).

- (2) a. cheleTa, Je amar bondhu, se boi porche
 boy-the who my friend he book reading
 'The boy, who is my friend, is reading a book'
- b. mou, Je rubiks kiub kineche, se amar bondhu
 Mou who Rubik's cube bought-has she my friend
 'Mou, who has bought a Rubik's cube, is my friend'

The occurrence of Je 'who' in non-restrictive relative clauses is shown in (2) where the human relative pronoun occurs after the head nouns in (2a) and (2b).

Je can also be used as an inanimate relative pronoun if any inanimate head noun occurs after it in the restrictive relative clause. However, Je 'which' never occurs in a non-restrictive relative clause.

- (3) a. Je boiTa tumi cao, seTa/ta tumi pabe
 which book-the you want that you get-will
 'You will get the book that you want'

- b. Je Dhaka banladeser rajdhani, ta mosliner
 which Dacca Bangladesh-of capital that Muslin's
 jonne prosiddho
 for famous

'Which Dacca is the capital of Bangladesh is
 famous for Muslin'

['The Dacca which is the capital of Bangladesh is
 famous for Muslin']
 The examples in (3) are grammatical as Je 'which' occurs
 before the inanimate nouns boiTa 'the book' and Dhaka
 'Dacca'. The following examples show the restriction on
 the occurrence of Je 'which' after the inanimate head nouns
 in the non-restrictive relative clauses.

- (3) a. *boiTa, Je tumi cao, ta tumi pabe
 b. *Dhaka, Je banladesher rajdhani, ta mosliner Jonne
 bikkhato

The ungrammaticality of (3a) and (3b) shows that Je 'which'
 can be used only in restrictive relative clauses.

3.1.2 Jini 'who': human and honorific

Though Jini 'who' is the honorific form of Je, it
 does not have the same privilege of occurrence in relative
 clauses, in that it cannot be followed by a head noun in a
 restrictive relative clause. Compare the following
 sentences where it is not followed by any head nouns.

- (4) a. Jini bhat khachchen, tini amar bondhu
 who rice eating he my friend
 'Who is eating rice is my friend'

- b. amader barite Jini esechen, tini amar bondhu
 our house-to who come-has he my friend
 'Who has come to our house is my friend'

In the above examples no head nouns occur after the relative pronoun Jini 'who'. The examples illustrate the occurrence of Jini in initial and medial positions in headless relative clauses. In non-restrictive relative clauses Jini can be followed by the head noun. However, the head noun cannot be deleted. Compare the following examples.

- (4) c. bhaddrolak, Jini esechilen, tini amar bondhu
 gentleman who came he my friend
 'The gentleman, who came, is my friend'
- d. Ø, Jini esechilen, tini amar bondhu
 'Who came is my friend' (lit)
- e. *Jini bhaddrolak esechilen, tini amar bondhu
 'Who the gentleman came is my friend'
 ['The gentleman who came is my friend']

(4d) is unacceptable as a non-restrictive relative clause, though it is correct as a headless relative. (4e) shows that no noun can occur after Jini in a restrictive relative. From these examples it can be seen that Jini only occurs (i) with head nouns in non-restrictive relatives, and (ii) in headless relative clauses. It never occurs in a restrictive relative with the head noun retained in surface structure.

3.1.3 Ja 'what/that': inanimate

Ja 'what/that' is an inanimate relative pronoun. The examples in (5) show its occurrence in relative clauses.

- (5) a. Ja tumi cao, ta tumi pabe
 what you want that you get-will
 'What you want will get that' (lit)
 ['You will get that you want']
- b. galper boigulo, Ja tumi caicho, ta pabe
 story-of books what you asking that get-will
 'You will get the story books that you are asking for'

Ja 'what/that' can occur either in the headless relatives (5a) or in the non-restrictive relative clauses (5b) but not in the restrictive relative clauses as it does not allow any head nouns after it.

3.1.4 Je 'what/that/which': ^{- human} ± inanimate

- (6) a. Je boiTā tumi cao, ta tumi pabe
 which book-the you want that you get-will
 'Which book you want you will get that'
 ['You will get the book that you want']
- b. Je honinTā sundor, seTā ami deḥkhechilam
 which deer-the beautiful that I saw
 'I saw the deer which is beautiful'

In the above examples Je occurs as an inanimate relative

pronoun followed by inanimate head noun. in (6a) and as an animate relative pronoun in (6b).

The occurrence of the different relative pronouns in Bengali relative clauses can be summed up thus:

- (7) a. The neutral human relative pronoun Je 'who' can occur in both restrictive and non-restrictive relative clauses.
- b. When Je 'who' occurs before or after any animate head nouns it becomes an animate relative pronoun. When it occurs before an inanimate head noun it becomes an inanimate relative pronoun. It occurs with an inanimate head noun only in restrictive relative clauses and never in non-restrictive relative clauses.
- c. The honorific relative pronoun Jini 'who' occurs with a head noun in non-restrictive relatives and without any head in headless relatives.
- d. The inanimate relative pronoun Ja 'what/that/which' can occur either in non-restrictive or in headless relative clauses but never in the restrictive relative clauses.

3.2 Double Relatives in Bengali

Bengali also possesses double relatives, which mark plurality, though plurality can also be shown with regular plural markers which are added to the relative pronouns. When double relatives are introduced in a sentence, the relatives are also followed by correlatives like the single relative. Double relatives, obtainable from the four varieties of regular relatives, are shown in (8).

- (8) a. Je-Je 'who-who' (who-pl): human and neutral
 b. Jini-Jini 'who-who' (who-pl): human and honorific
 c. Je-Je 'which-which' (which-pl): $\begin{matrix} + \\ \text{animate} \end{matrix}$
 d. Ja-Ja 'what-what' (what-pl) : $\begin{matrix} - \\ \text{human} \end{matrix}$ $\begin{matrix} + \\ \text{animate} \end{matrix}$
 e.

<u>Singular</u>	<u>Plural</u>
Je 'who'	Jara 'who-pl'
Jini 'who'	Jāra 'who-pl'
Je 'which'	Je (no plural suffix possible)
Ja (what'	Ja (" " " ")

(8e) illustrates the marking of plurality by regular inflections. Only Ja 'what/that' and Je 'which' are invariable. The following examples show the use of the double relatives.

- (9) a. Je Je lok esechilo, se se cole gæ che
 who who man came he he gone have
 'Who the people came have gone'
 ['The people who came have gone']

b. Je Je boi cao, se se boi pabe
 which which book want that that book get-will
 'Which books you want will get those'

['The books which you want will get those']

c. tumi Ja Ja Jinis cao, ta ta pabe
 you what what things want that that get-will
 'You will get those things that you want'

(10) a. Chelera, Je Je klelbe, se se ekhane eso
 boys who who play-will he he here come
 'You boys, who want to play, come^{over} here'

b. bhaddrollok, Jini Jini esechilen, tini tini boi
 gentlemen who who came he he book
 peechen
 got

'The gentlemen, who came, got books'

c. tumi boigulo, Ja Ja cao, ta ta nite paro
 you books what what want that that take can
 'The books, which you want, you can take them'

(11) a. Je Je esechilo, se se cole gæ che
 who who came he he gone have
 'Those who came have gone'

b. *Je Je cao, ta ta pabe
 which which want that that get-will
 'Which you want, you will get those'

c. Jini Jini aste can, tini tini aste paren
 who who come-to want he he come-to can

'Who want to come can do so'

['Those who want to come can do so']

- d. tumi Ja Ja caicho, ta ta pabe
 you what what asking that that get-will
 'You will get those (things) that you are asking
 for'

The examples in (9) show that all three regular relatives can occur as double relatives in restrictive, non restrictive and headless relatives, with the exception of Jini Jini 'who-pl', which cannot occur in the restrictive relative clause as it cannot be followed by a head noun. The occurrence of human Je Je 'who-pl' is shown in (9a), the inanimate Je Je 'which-pl' in (9b) and inanimate Ja Ja 'what-pl' in (9c). The occurrence of the double relatives in a non-restrictive relative clause is shown in (10). The double relative Je Je 'which-pl' is ungrammatical with inanimate head nouns. (10a, b) illustrate Je Je with an animate head noun and (10c) illustrates the double relative Ja Ja 'what-pl'. The occurrence of the double relatives in the headless relative clauses is shown in (11). It allows all the double relatives except the inanimate Je Je 'which-pl'. The double relative pronouns have the same distribution as the single relative pronouns in the three different types of relative clause illustrated in (2-5). In (9-11), the double relative pronouns can be replaced by plural relative pronouns, which are more acceptable in Colloquial Bengali, the double relative pronouns being rare.

The following examples are given to show the occurrence of the plural relatives.

(12) Headless Relative Clause

a. Jara esechilo, tara cole gæ che
 who-pl came they gone have
 'Those who came have gone'

b. tomra Ja cao, ta pabe
 you-pl what want that get-will
 'You will get what you want'
Non-restrictive Relative Clause

c. skuler chele, Jara khelche, tara purosakar pabe
 school-of boys who playing they prize get-will
 'The students of the school, who are playing,
 will get prizes'

d. bhaddrolak, Jāra bose achen, tāra skuler
 gentlemen who sitting are they school-of
 sikkhok
 teachers
 'The gentlemen, who are sitting, are teachers of
 the school'

e. amar boigulo, Ja tumi caicho, ta pabe
 my books which you asking that get-will
 'My books, which you are asking for, will get
 them'

Restrictive Relative Clause

- f. Je chelegulo khelche, tara amader protibesi
 who boys playing they our neighbour
 'Who the boys are playing are our neighbours'
 ['The boys who are playing are our neighbours']
- g. Je boigulo ami porchi, segulo amar nje
 which books I reading those mine not
 'The books which I am reading are not mine'
- h. tumi Je Jinis cao, ta pabe
 you what thing want that get-will
 'You will get the things that you are asking for'

(12a) and (12b) show the occurrence of plural relatives in headless constructions with Jara 'who-pl' and Ja 'what', though Ja, as mentioned before, is invariable. (12c) shows the plural pronoun Jara 'who-pl' in a non-restrictive relative clause and (12a) shows Jāra 'who-pl' formation, as the plural honorific pronoun. (12e) has the invariable form Ja. The plural relative pronouns do not occur in restrictive relative clauses, as in (12f, g), such sequences as *Jara chelegulo 'who-pl boys', *Jāra bhaddrolokgulo 'who-pl gentlemen', being ungrammatical. (12f) and (12g) show that plurality is indicated by the plural head nouns chelegulo 'boys' and boigulo 'books' and not by the relative pronouns, Je being used in each case. Sentences like (12h) are more acceptable with Je 'which' rather than with Ja 'what'. Plurality is signalled by the form of the

noun or determiner or by a quantifier, as in (13).

- (13) Je sɔb lok bose ache, tara amar poricito
 who all men sitting are they my known
 'All the men who are sitting are known to me'

It should be mentioned here that the correlatives do not present any complications, as they always have a plural inflection (cf. 12h).

3.3 Correlatives in Bengali Relative Constructions

All the relative pronouns in Bengali have their correlatives. The correlatives are not identical for all and they may not be interchanged. Je and Jini 'who' are human relative pronouns and have their human correlatives, though they are not identical as they vary on honorific and neutral rank. As Ja 'what/that' is inanimate, it is matched with its inanimate correlative ta 'that'. If Je is taken as a deictic pronoun (a view that I will discuss shortly), its correlative will be human if it modifies an human noun, and inanimate if it modifies an inanimate noun. The corresponding correlatives of the relative pronouns are shown below.

(14) Relative Pronouns : Relative Correlatives

a. Singular

Je 'who': neutral and human se 'he, she'

Jini 'Who': honorific and human tini 'he, she'

Ja 'what': animate ta 'that'

Je 'that': +animate se 'that'

-human

b. Plural

Jara 'who': neutral and human tara 'they'

Jāra 'who': honorific and human tāra 'they'

Je 'what': -animate ta 'that'

Je 'what': +animate se 'that'

-human

Correlative constructions are regular in Bengali complex sentences. Certain correlative markers are used in non-relative sentences. A few such correlatives are shown in (15).

- (15) a. Joto 'as much (many) as': toto 'so much (many)'
 b. Jekhane 'where': sekhane 'there'
 c. Jodi 'if': tobe 'then'

Examples in sentences are given in (16).

- (16) a. Joto boi tumi cao, toto tumi pabe
 as many books you want so many you get-will
 'As many books you want will get them' (lit)
- b. Jekhane boi ache, sekhane pensilTa pabe
 where book is there pencil-the get-will
 'You will get the pencil next to the book'
- c. Jodi tumi aso, tobe ami Jabo
 if you come then I go-will
 'If you come then I will go'

3.4 Restrictions on the Occurrence of Je

There are some restrictions on the occurrence of Je 'who/what/that' in sentence-initial position. In the present study Je has so far been analysed as an invariable relative pronoun. However, it may be interpreted from three different syntactic standpoints. To put it another way, Je may be analysed as a relative pronoun, as a deictic relative pronoun and as a complementizer. This is discussed in the following section.

3.4.1 Je 'who' as a Relative Pronoun and a Deictic Marker

- (17) a. Je # ghore Jabe, se miSTi pabe
 who room-to go-will he sweet get-will
 'Who goes to the room will get sweets'
- b. cheleTa, Je # boi porche, se amar bondhu
 boy-the who book reading he my friend
 'The boy, who is reading a book, is my friend'

In (17a) Je 'who' is followed by an inanimate noun and a verb and occurs without any head noun. In the above example Je 'who' occurs as a relative pronoun. There exists a noticeable pause between Je and the inanimate noun.

However, Je 'who' does not function as a relative pronoun with respect to a following inanimate noun. In (18), for instance, Je occurs before an inanimate noun but it does not qualify as a relative pronoun. On the other hand, if

Je 'who' occurs after the head noun it is always a relative pronoun, as in (17b). The main reason is that Je 'who' is separated from the head noun by a comma intonation and a potential pause exists between Je 'who' and boi 'book'.

(17b) shows the construction of the non-restrictive relative clauses in Bengali where the head noun occurs before the relative pronoun and a pause occurs between them. In many sentences like (17b), where Je 'who' occurs after the head noun and the comma intonation exists between them, then the Je can be taken as a relative pronoun.

- (18) a. tumi Je + boi cao, ta pabe
 you what book want that get-will
 'You will get the book that you want'
- b. mēna Je + sinema dekhechilo, ta ami jnek
 Moina which movie saw that I many
 agei dekhechilam
 before saw
 'The movie which Moina saw, I saw a long time ago'
- c. cheleTa Je + boi porche, seTa upponnas
 boy-the which book reading that novel
 'The book which the boy is reading is a novel'

In (18a-c), Je occurs as a deictic relative pronoun. A plausible explanation would be that in the above examples Je does not occur as a human relative pronoun and has lost its relative quality. Note also (19a, b) where Je is human and is followed by human nouns.

- (19) a. Je + robindronath nobel puros kar peechilen, tini
 who Rabindranath Nobel Prize received he
 amar prio gɔlpolekhok
 my favourite story-writer
 'Who Rabindranath received the Nobel Prize is my
 favourite story-writer'
 ['Rabindranath who received the Nobel Prize is my
 favourite story-writer']
- b. Je + lokTa boi porche, se amader protibesi
 who man-the book reading he our neighbour
 'Who the man is reading a book is our neighbour'
 ['The man who is reading a book is our neighbour']

In the above examples, Je 'who' can be regarded as a deictic relative pronoun as it is followed by human nouns and a close juncture exists between them (shown by +). It should be mentioned here that though the proper names generally occur in non-restrictive relative clauses, (18a) shows the occurrence of robindronath in restrictive relative clause as it occurs after the relative pronoun with a close juncture.

There are two syntactic environments where Je 'who' occurs as a relative pronoun. This may be explained in the following way:

- (20) a. Je 'who' becomes a relative pronoun, if it occurs
 in a relative construction without a head noun.
- b. If Je occurs after the head noun and a comma

intonation exists between them and a slight pause between Je and the following noun, it is always a relative pronoun.

Examples of (20a) are given in (21). Examples of (20b) can be found in (23).

(21) a. Je + Any other Pronoun

Je amar bhai, se tomar bondhu
 who my brother he your friend
 'Who is my brother is your friend'

b. Je + Any Verb

Je hasche, se bhari dustu
 who smiling she very naughty
 'Who is smiling is very naughty'

c. Je + Pause + Inanimate Noun

Je # ghore Jabe, se boi pabe
 who room-to go-will he book get-will
 'The one
 Who goes to the room will get a book'

A string such as Je bhat khabe 'who will eat rice' is differently interpreted depending on the type of juncture occurring before Je and bhat. If there is a pause, Je is a relative pronoun (see 22a). If no pause exists between the two constituents, then Je will be regarded as a deictic relative pronoun, as in (22b).

- (22) a. Je # bhat khabe, se æ khon skule
 who rice eat-will he now school-at
^{c The one}
 'Who will eat rice is now at school'
- b. tumi Je + bhat khabe, ta aekhon rādha hœni
 you which rice eat-will that now cook is not
 'The rice which you will eat is not yet cooked'

The difference between (22a) and 22b) (as far as the structure relative_{is} concerned) is that bhat 'rice' is separated from the relative pronoun by a pause in (22a), whereas, no such pause exists between them in (22b) and a close juncture is noticeable between Je 'which' and bhat 'rice'. bhat is the antecedent in (22b), whereas no antecedent occurs in (22a). That is, (22a) is different in structure from (22b).

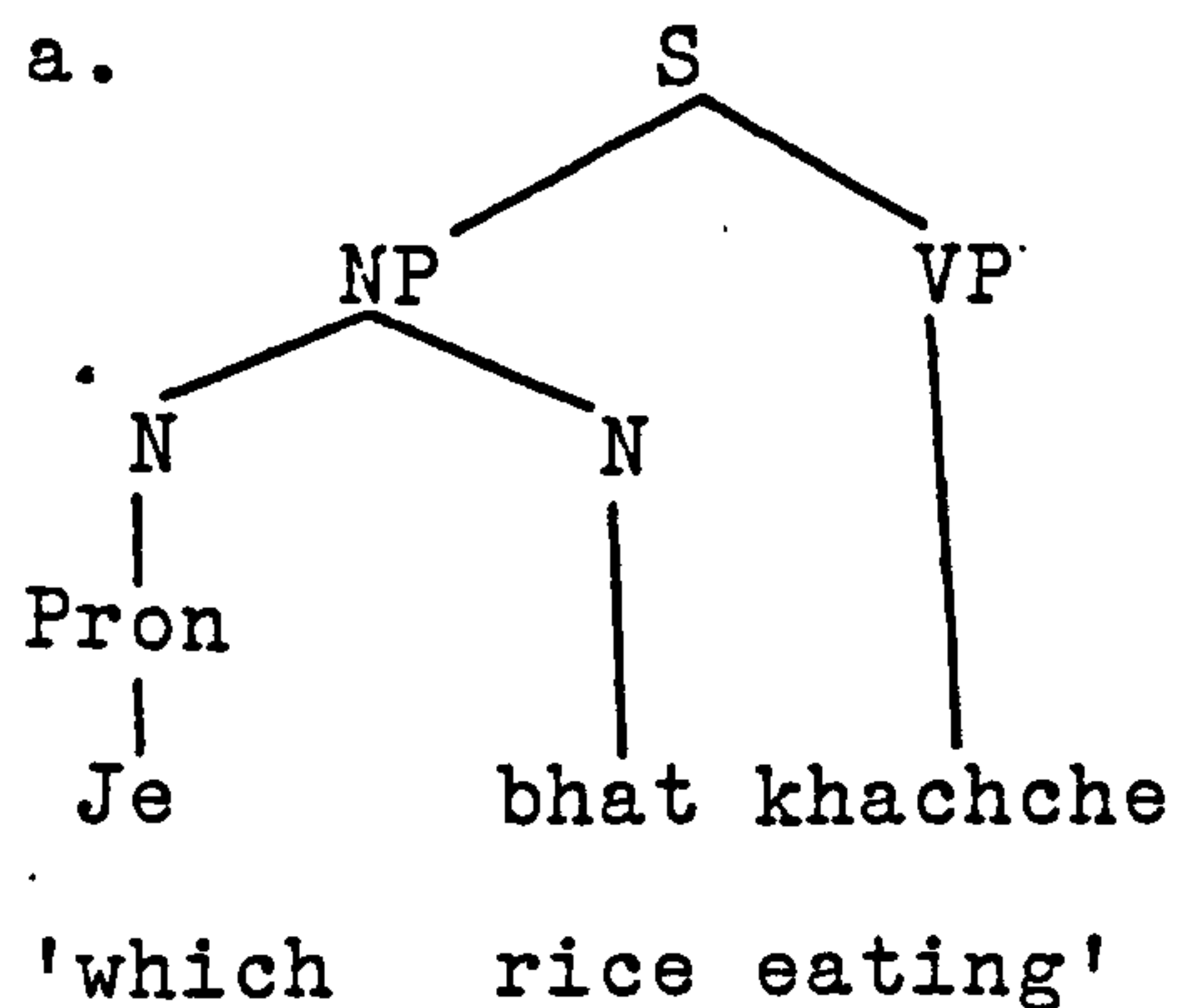
(23) Antecedent + Pause + Je

cheleTa, Je lœmba, se amar bondhu
 boy-the who tall he my friend
 'The boy, who is tall, is my friend'

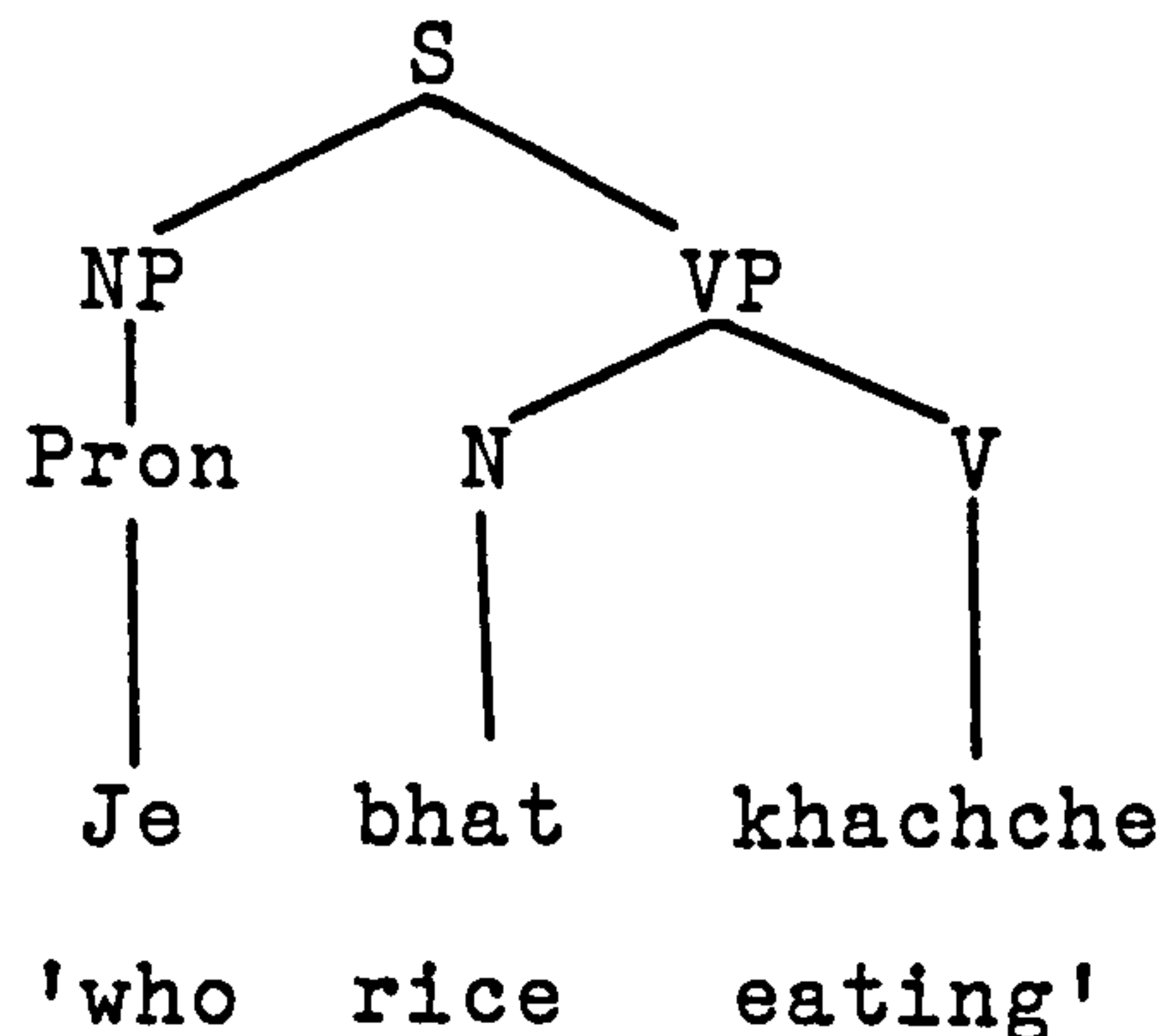
In (23), Je 'who' occurs as a relative pronoun as it follows the antecedent (cheleTa) with a pause.

The difference between the relativized noun phrases like Je bhat khachche 'Who is eating rice' and deictic noun phrases like Je-bhat khachche 'which rice (he) is eating' may be shown with the following tree-diagrams.

(24) a.



b.



In (24a), Je occurs as a deictic relative pronoun and it occurs in the same NP as the modified object bhat 'rice'.

In (24b), Je 'who' is separated from its object by a slight pause. Consider also the examples in (25).

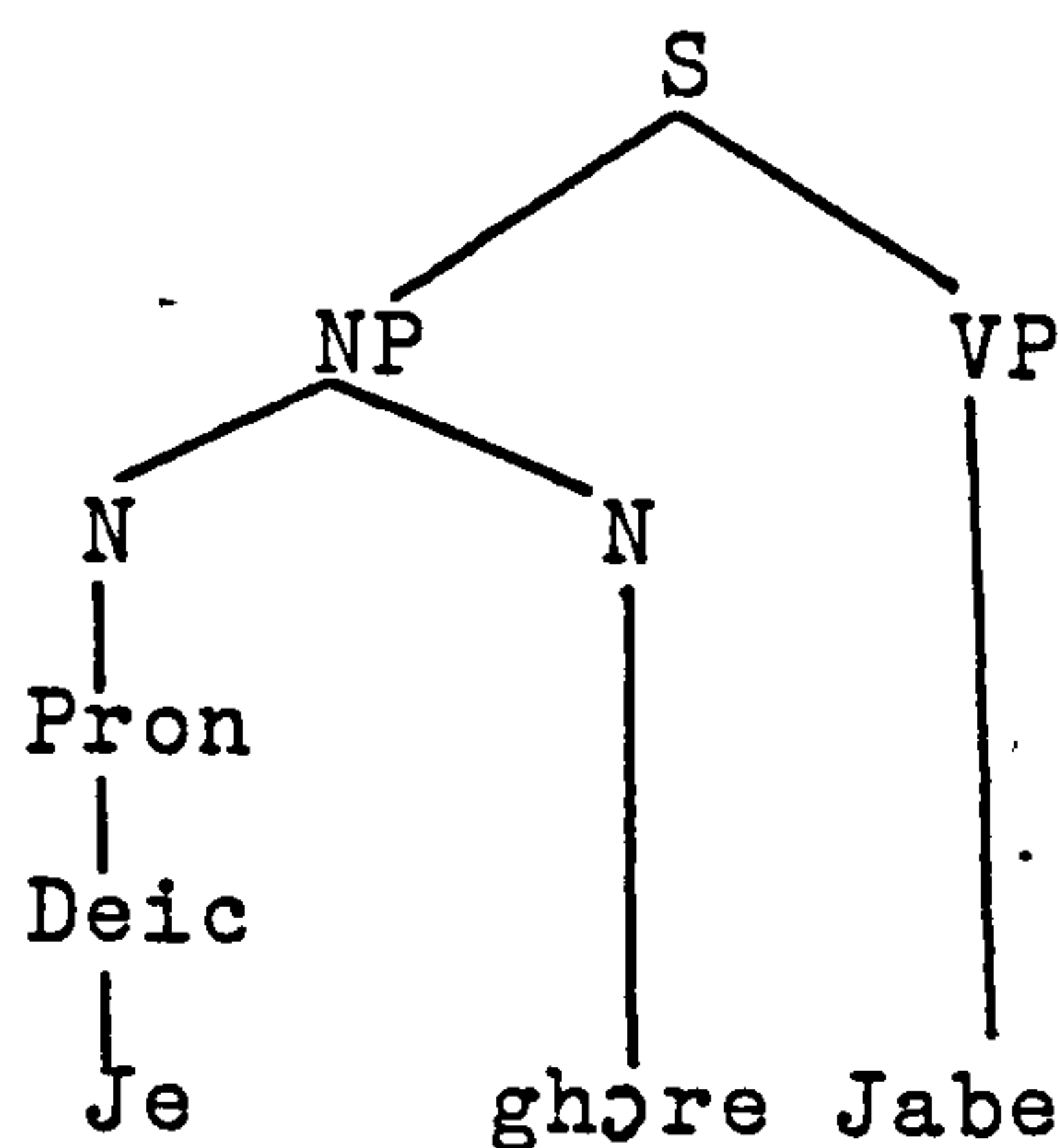
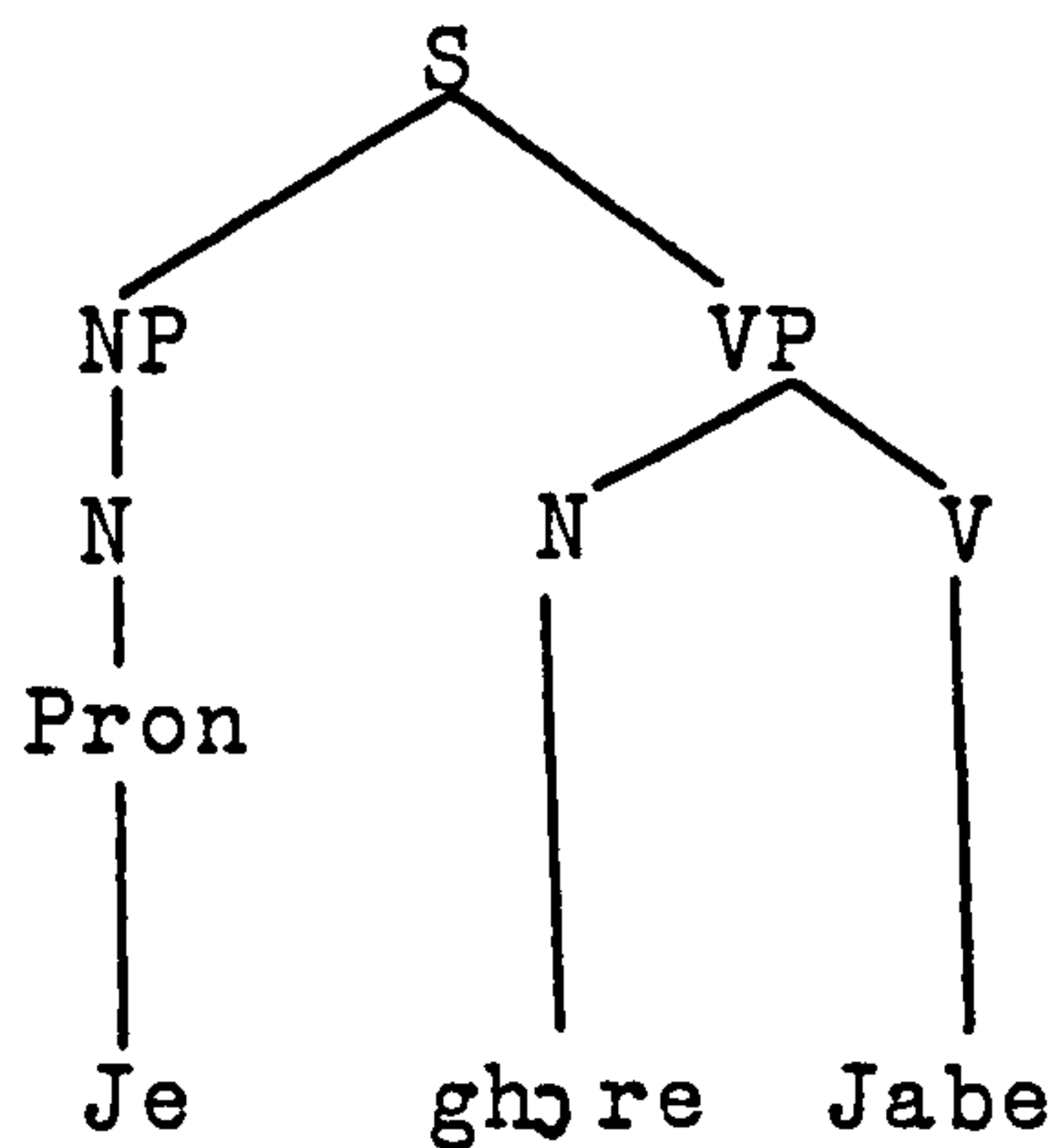
(25) a.

Je ghore Jabe ...
 who room-to go-will
 'Who will go to the room'

b.

Je-ghore Jabe ...
 which-room-to go-will
 'In which room (you)
 will go'

(25) á.



If the relative pronoun is separated from the inanimate noun by a pause (25a), then the meaning of the noun phrase will be 'Who goes to the room', and the relative pronoun is not deictic. On the other hand, if the relative pronoun shows close juncture with the immediate inanimate noun then

the meaning of the noun phrase is quite different (25b). The meaning of the second noun phrase (25b) is different from that of the first one (25a), as the latter noun phrase expresses 'in which room (you) will go' or simply [Je-ghore] 'in which room', then ghor 'room' is marked definitely by the deictic relative pronoun as that room as opposed to any other possible room. In that expression Je does not occur as a relative pronoun but as a deictic relative pronoun. Moreover, if Je is followed by two nouns, it has to be regarded as a deictic relative pronoun. Compare the following sequences, where Je is shown as a relative pronoun and as a deictic pronoun.

- (26) a. Je-ghore boi ache -REL, +Deic [Rel Pr+N+N+V]
 which room-to book has
- b. tomar Je-boi -Rel, +Deic[Pron+Rel Pr+N]
 your that book
- c. Je tomar bhai +Rel, -Deic[RelPr+Pron+N]
 who your brother
- d. Je-meeTa khelche -Rel, +Deic[RelPr+N+V]
 who girl-the playing
- e. Je [ghore Jabe] +Rel, +Pause, -Deic
 who room-to go-will [RelPr+Pause + N + V]
- f. Je [bhat khachche] +Rel, +Pause, -Deic
 who rice eating [RelPr + Pause + N + V]

When Je qualifies as a relative pronoun the

sequence of lexical items in a noun phrase has three possibilities which are shown in (20). The sequence of lexical items in (19) are a reliable test for Je 'who' as a relative pronoun. (25c) will eliminate sequences like Je-ghore 'in which room' as there is no pause between the two lexical items. (19c) predicts sequences like Je # ghore Jabe 'who will go to the room' as a subject, an object, and a verb as shown in (25a) and will eliminate the deictic sequences as shown in (25b).

Je 'who' becomes a deictic pronoun if immediately followed by a NP with which it is in close juncture. The examples in (27) show the occurrence of deictic Je 'who'.

- (27) a. Je lokTa baJar korche, se amader protibesi
 who man-the shopping doing he our neighbour
 'Who the man is shopping is our neighbour'
 ['The man who is shopping is our neighbour']
- b. Je cheleTa amar bondhu, se tomar schopaThi
 who boy-the my friend he your class-mate
 'Who the boy is my friend is your class-mate'
 ['The boy who is my friend is your class mate']
- c. Je lokTa boi porche, se amader protibesi
 who man-the book reading he our neighbour
 'Who the man is reading a book is our neighbour'
 ['The man who is reading a book is our neighbour']

In all the examples the relative pronoun Je 'who' is deictic and is in a close juncture relationship with the item following it.

The examples in (28) allow us to see the sequences of relative pronoun and the antecedent in restrictive and non-restrictive relative clauses.

- (28) a. Je-cheleTa ... Restrictive
 who-boy-the 'who the boy'
- b. cheleTa, Je ... Non-restrictive
 boy-the who 'the boy, who'
- c. Je-cheleTa porche, se amar schopaThi
 who boy-the reading he my. class-mate
 'Who the boy is reading is my class mate'
 ['The boy who is reading is my class-mate']
- d. cheleTa, Je porche, se amar schopaThi
 boy-the who reading he my class-mate
 'The boy, who is reading, is my class-mate'

3.4.2 Je as a Complementizer

It is clear from the above discussion that Je 'who' can function as a relative pronoun or a deictic marker. Je may also be analysed as a complementizer. A detailed discussion of complement clauses and complementizers has been made in Chapter 5 in this dissertation, so that only a brief summary is required here on Je as a complementizer. Consider the following examples.

- (29) a. ami Jantam je ei boiTa colbe na
 I knew that this book-the sell-will not

'I knew that this book won't sell'

b. ami cai Je tumi Jao

I want that you go

'I want you to go'

c. mœna Janto Je mou skule gæ che

Moina knew that Mou school-to gone-has

'Moina knew that Mou has gone to school'

d. ami Jantam Je bhøddroløk, Jini esechilen, tini

I knew that gentleman who came he

æ kʃon lekhok

a writer

'I knew that the gentleman who came was a writer'

e. ami Jantam Je, Je Jonne se dhar koreche, ta

I knew that that for he loan took that

tar niJer Jonne nœ

his own for not

'I knew that the loan he has ~~taken~~ was not
for himself'

In all the examples (29a-e), Je 'what' is shown as a complementizer. (29a-c) are shown without relative clauses, while (29d-e) incorporate relative clauses. In (29d-e), Je 'that' is shown as a complementizer before the head noun of the relative clause. In all the examples Je 'that' occurs as a subordinating conjunction and hence it may be taken as a complementizer in Bresnan's sense (Bresnan, 1979:6).

It is clear from the above examples that Je 'that' has three functions depending on the syntactic pattern of the sentence. This claim will be clarified extensively in Chapter 5. We can end the present discussion with the following example (30) where a relative pronoun, a deictic pronoun and a complementizer are used in the same sentence.

- (3) amader barite Je₁ esechilo, oi Je₂ lokTa bes
 our house-to who came that who man-the quite
 lɔmba, se Je₃ æ to calak ta Jantam na
 tall he that so clever that knew not
 'I did not know that the tall man who came to our
 house was so clever'

The underlined Je₁ 'who' is a relative pronoun, Je₂ 'who' is a deictic marker, and Je₃ 'that' is a complementizer.

3.5 Relative Pronoun Deletion

The deletion of a relative pronoun from a relative clause is not possible in Bengali. Neither does it allow the retention of the relative pronoun and the deletion of the correlative from the matrix sentence. If the relative pronoun is deleted the sentence becomes ambiguous due to the retention of the correlative in the matrix sentence. It is also not possible to delete the relative pronoun and the correlative pronoun in a complex construction. This shows that in a relative-correlative structure Bengali prefers to retain both the elements in a complex structure. This may be shown in the following examples.

- (31) a. cheleTa, Je amar bondhu, se esechilo
 boy-the who my friend he came
 'The boy, who (is) my friend, (he) came'
- b. *cheleTa, Ø amar bondhu, se esechilo
 boy-the my friend he came
 'The boy (is) my friend (he) came'
- c. *cheleTa, Je amar bondhu, Ø esechilo
 boy-the who my friend came
 'The boy, who is my friend, came'
- c. *cheleTa, Ø amar bondhu, Ø esechilo
 boy-the my friend came
 'The boy (is) my friend came'

The above examples show that deletion either of the relative

pronoun, correlative pronoun, or both relative and correlative pronouns yield unacceptable sentences. The relative pronoun is deleted in (31b), the correlative pronoun in (31c) and both relative and correlative pronouns in (31d). Sentences like (31) show that if the relative pronoun occurs as the subject of the relative clause, it does not allow the deletion of the relative pronoun and its coreferential element in the matrix sentence. However, if the relative pronoun does not occur as the subject of the relative clause, it allows the deletion of the correlative element from the matrix sentence. The deletion of the correlative pronoun is possible only if the matrix sentence precedes the relative clause. These sentences, however, do not belong to any colloquial pattern of Bengali, but are strictly literary. Examples are given in (32).

(32) a. se cheleTa barandae dārie ache, Je amader
 he boy-the corridor-on standing is who our
 barite esechilo
 house-to came
 '(He) the boy is standing on the corridor who
 came to our house'

á. Ø cheleTa barandae dārie : ache, Je amader
 boy-the corridor-on standing is who our
 barite esechilo
 house-to came
 'The boy is standing on the corridor who came to
 our house'

b. se meeTa prosadhon korche, Je rophiker
 she girl-the toilet doing who Rafiq's
 bandhobi
 girl-friend

'(She) the girl is dressing who is Rafiq's
 girlfriend'

['The girl is dressing who is Rafiq's girl-friend']

ḃ. Ø meeTa prosadhon korche, Je rophiker
 girl-the toilet doing who Rafiq's
 bandhobi
 girl- friend

'The girl is dressing who is Rafiq's girl-friend'

All these examples (32á-ḃ) show that the correlative pronouns can be deleted from Bengali relative clauses only if the matrix sentence precedes the relative clause. (32á-ḃ) show that the correlatives are present in the deep structures of the sentences, but can be deleted in the surface structures.

There is another kind of construction in Bengali where the correlative does not occur in its surface structure. However, it does not show any deletion of the correlative in its surface structure. This kind of sentence cannot be cited as a rule of coreferential pronoun deletion but a separate type of relative construction without any correlative element like the English relative clause. This is illustrated in (33).

- (33) a. amar æ kTa putul ache
 I a doll have
 'I have a doll'
- b. amake ammu æ kTa putul kine 'dieche
 me mother a doll bought has
 'My mother has bought a doll for me'
- c. amar æ kTa putul ache, Ja ammu amake kine
 I a doll have which mother me bought
 dieche
 have
 'I have a doll which mother has bought for me'

(33c) shows the deletion of the identical NP (putul 'doll') in the relative clause for an inanimate relative pronoun (Ja 'which') and the absence of any coreferential pronoun in the matrix sentence (cf. Chapter One 61g). Sentences like (33) clearly show that a relative clause can be constructed in Bengali without any coreferential pronoun if the object NP is relativized and the matrix sentence precedes the relative clause.

3.6 Antecedent and Postcedent

An embedded sentence forming a relative clause may contain either an antecedent or a postcedent. The modified noun may either precede the relative pronoun or follow it. The process of preceding and following of the head noun is important as it marks two types of relative clause, i.e. the restrictive and the non-restrictive. In English, normally the relative pronoun follows the antecedent. However, in Bengali, an antecedent occurs before the relative pronoun in the non-restrictive relative clause and follows the relative pronoun in the restrictive relative clause. When the head noun occurs before the relative pronoun it can be taken as the antecedent, whereas, when it follows the relative pronoun it may be taken as the postcedent. There are thus two sentential environments of the head nouns in Bengali relative clauses, which may be seen in the following examples.

- (34) a. Je lokTa bes buddhiman, se esechilo
 who man-the quite intelligent he came
 'Who the man is quite intelligent came'
 ['The man who is quite intelligent came']
- b. lokTa, Je bes buddhiman, se esechilo
 man-the who quite intelligent he came
 'The man, who is quite intelligent, came'

In (24a), lokTa 'the man' is the postcedent of the relative pronoun Je 'who' as it occurs after the relative marker in

the restrictive relative clause, whereas in (34b), lokTa 'the man' occurs as the antecedent of the relative pronoun in the non-restrictive relative clause. The above examples show that the antecedent normally occurs in the non-restrictive relative clause and the postcedent normally occurs in the restrictive relative clause.

However, the postcedent may be dropped in the sentence after the relative pronoun if the verb occurs after it. The following examples are given to show the absence of a postcedent in restrictive relative clauses.

- (35) a. Je lokTa esechilo, se bes calak
 who man-the came he quite clever
 'Who the man came is quite clever'
 ['The man who came is quite clever']
- b. Je Ø esechilo, se bes calak
 who came he quite clever
 'Who came is quite clever'

The deletion of the postcedent from the restrictive relative clause converts the latter into a headless relative (see Chapter Two, section 2.1.8). To make it headed the postcedent may also be moved to the matrix sentence from the relative clause as shown in (35c).

- (35) c. Je esechilo, se lokTa bes calak
 who came he man-the quite clever
 'Who came the man is quite clever'
 ['The man who came is quite clever']

One interesting change can be noticed after shifting the head noun from the relative clause to the matrix sentence is that the latter becomes a deictic matrix sentence as the head noun occurs after the coreferential pronoun. No deletion of the antecedent is allowed in the non-restrictive clause as it becomes unacceptable (i.e. unacceptable because the head noun is missing before the relative clause) as shown in (35e).

(35) d. lokTa, Je bes calak, se esechilo
 man-the who quite clever he came
 'The man, who is quite clever, came'

e. . Ø, je bes calak, se esechilo
 who quite clever he came
 'Who is quite clever came'

Three variations in the construction of the relative sentences can be observed where either the antecedent or the postcedent are dropped or the antecedent moved to the matrix sentence from the relative clause. These may be stated in the following way:

(36) a. When the postcedent is dropped from a restrictive relative clause, the latter becomes a headless relative;

b. When the postcedent is moved from the relative clause to the matrix sentence, it becomes a deictic matrix sentence;

c. When the antecedent is deleted from the non-

restrictive relative clause, the latter becomes a headless relative clause. (Cf.2.1.8)

One interesting point to note is that the honorific relative pronoun Jini 'who' can have no postcedent noun in a restrictive relative clause, i.e. Jini can be inserted only into headless or non-restrictive relatives. The occurrence of Jini with antecedent and postcedent is shown in the following examples.

- (37) a. Jini gɔtokal klase lekcar diechilen, tini
 who yesterday class-in lecture gave he
 bhasatɔtter namkɔra oddhapok
 Linguistics-of famous teacher
 'Who gave a lecture in the class yesterday is a famous teacher in Linguistics' (lit)
- b. *Jini bhaddrolok gɔtokal klase leckcar
 who gentleman yesterday class-in lecture
 diechilen, tini bhasatɔtter namkɔra oddhapok
 gave he Linguistics-of famous teacher
 'Who the gentleman gave a lecture in the class yesterday is a famous teacher in Linguistics'
 ['The gentleman who gave a lecture in the class yesterday is a famous teacher in Linguistics']
- c. bhaddrolok, Jini bhasatɔtter oddhapok, tini
 gentleman who Linguistics-of teacher he
 gɔtokal klase lekcar diechilen
 yesterday class-in lecture gave

'The gentleman, who is a teacher in Linguistics,
delivered a talk yesterday in the class'

(37c) shows the correct occurrence of an antecedent in a non-restrictive construction before the honorific relative pronoun and (37a) illustrates the absence of any postcedent after the honorific relative pronoun. However, (37b) is not acceptable in Bengali, as nouns here bhaddrolok 'gentleman' - cannot occur after any honorific relative pronoun. Even the honorific non-relative pronouns cannot be followed by any nouns. (cf.38).

(38) a. *tini bhaddrolok boi porchen
he gentleman book reading
'He gentleman is reading a book'

b. *apni bhaddrolok amader barite asben
you gentleman our house-to come
'You gentleman please come to our house'

It is clear from these examples that there is a constraint in Bengali on the occurrence of any noun after an honorific pronoun:

(39) No nouns can be used after the honorific relative pronoun Jini 'who'. If any noun occurs after Jini the relative clause will be regarded as ungrammatical and unacceptable.

Moreover, nouns like bhaddrolok 'gentleman' are themselves honorific, as opposed to the non-honorific noun lok 'man'.

So, it can be said *Jini bhaddrolok 'who gentleman' is ungrammatical in Bengali as two honorific items cannot occur next to each other with a close juncture. However (40), in which bhaddrolok follows the non-honorific relative pronoun Je 'who', is grammatical.

- (40) Je bhaddrolok klase lekcar diechilen, tini
 who gentleman class-in lecture gave he
 bhasatutter namkora oddhapok
 Linguistics-of famous teacher
 'Who the gentleman gave a lecture in the class is a
 famous teacher in Linguistics'
 ['The gentleman who gave a lecture in the class is a
 famous teacher in linguistics']

Note that non-honorific Je 'who' can co-occur with an honorific noun even in verbal and correlative sequences: diechilen 'gave' (ordinary verbal pattern diechilo 'gave') and tini 'he' (ordinary pronominal pattern se 'he/she'). So, the constraint on the occurrence of honorific pronoun after the relative pronoun can be extended in the following way:

- (39) Any honorific noun can occur after the non-honorific pronoun Je 'who', as the occurrence of two honorific items is restricted in Bengali.

When the inanimate deictic relative pronoun Je 'which/that' is followed by any inanimate noun, the

postcedent cannot be dropped for a headless clause, as without any postcedent the sentences do not carry any meaning at all. This may be shown in the following examples.

- (41) a. tumi Je-boi cao, ta pabe
 you what book want that get-will
 'You will get the book that you want'
- á. *tumi Je Ø cao, ta pabe
- b. Je gache phul ache, seTae cōro tumi
 which tree-on flower has that-in climb you
 'You climb on the tree which has flowers'
- ḃ. *Je Ø phul ache, seTae cōro tumi
- c. Je-dokane boi ache, tumi sekhane Jao
 which shop-in book has you there go
 'You go to the shop which has books'
- ć. *Je Ø boi ache, tumi sekhane Jao

If the postcedents are removed, the above sentences are ungrammatical as they cannot be fully interpreted (41á, ḃ, ć). It is always assumed that deictic relatives refer to specific objects. Thus, sentences (38c & 39c) are ungrammatical.

- (42) a. tumi Je-boi cao, ta pabe
 'You will get the book that you want'
- b. tumi boi cao, ta pabe
 'You want a book (and) you will get it'

c. *tumi Je Ø cao, ta pabe

(43) a. tumi Je-boi cao, ta pabe

'You will get the book that you want'

b. *tumi Je Ø cao, ta pabe

you what want that get-will

c. *tumi Je Ø cao, se boi pabe

you what want that book get-will

'You will get the book that you want'

In (42a), boi 'book' is mentioned specifically, whereas in (42b), no specific book is referred to, and any X, Y, Z books could be taken. In (42a), only one or some specific books are requested, not any books at random. (43b) and (43c) exemplify unacceptability at both syntactic and semantic levels. The inanimate Je 'which' can never occur without a head noun and shows incompleteness both in structure and meaning even after moving the head noun to the matrix sentence (43c).

Like Je and Jini 'who', the inanimate relative pronoun Ja 'which' does not have the same sequential order of using the postcedent after it, as do Je and Jini 'who'. When the postcedent does not occur after Ja 'what/that', the relative clause becomes headless. However, Ja allows the antecedent in the non-restrictive relative clause. The following examples are given to show the absence and presence of the postcedent and the antecedent after Ja 'what/that/which'.

derived; and

- iii. If the antecedent is deleted from the non-restrictive relative clause, a headless relative is derived.
- c. Typically, no postcedent occurs after the honorific relative pronoun Jini 'who'.
- d. If the relative pronoun is non-honorific (Je 'who') then an honorific postcedent can be used.
- e. If the honorific relative pronoun (Jini 'who') occurs in the non-restrictive relative clause, then the honorific antecedent can occur before it.
- f. The postcedent can never be deleted after the inanimate deictic pronoun Je 'which/that/what'.
- g. No postcedents occur after the inanimate relative pronoun Ja 'what/that/which'.
- h. The antecedents can occur before the inanimate relative pronoun Ja 'what/that/which'.

3.7 Determiners

Determiners are normally used in both restrictive and non-restrictive relative clauses. All the determiners used in relative clauses occur before the antecedents and the postcedents. In restrictive clauses determiners follow the relative pronoun and precede the postcedent. In a non-restrictive relative clause, however, the determiner precedes the antecedent and the relative clause. The various patterns are given in (46) and exemplified in (47).

(46) a. RRC: Rel Pron + Det + Postcedent

b. NRRC: Det + Antecedent + Rel Pron

These are exemplified in the following sentences.

(47) a. Je kono chele e kaj kare, se buddhiman
 who any boy this work does he intelligent
 'Any boy who does this sort of work is intelligent'

b. kono chele, Je e kaj kare, se bhalo nãe
 any boy who this work does he good not
 'Any boy who does this sort of work is not good'

(47a) is a restrictive relative clause, (47b) a non-restrictive relative clause. The determiners seem to be more specific in non-restrictive relative, as pointed out by Smith (1969). According to her paper, the determiners have a definite role in the non-restrictive relatives and indefinite role in the restrictive relatives. This is

because the relative pronoun occurs after the antecedent in non-restrictives. Owing to the different possibilities of the determiners, Smith (1969: 249) distinguishes three categories of determiners, which we will adopt here. It should be mentioned that Smith's description of non-specific (any, all), specified (a, the) and unique (Ø, proper names) determiners in restrictive and non-restrictive relative clauses of English is not totally applicable, as Bengali relative clauses do not impose the same restrictions on determiners. Smith explains the determiners in the following way:

- (48) a. Determiners which are used only in non-restrictive relative clauses may be taken as Unique (U).
- b. Determiners which occur only in restrictive relative clauses may be called Non-specific.
- c. Specified determiners (SD) are those which occur both in restrictive and non-restrictive relative clauses.

3.7.1 Non-Specified Determiners

Non-specific determiners like kono 'any' and sob 'all' can precede the head noun in a restrictive relative clause. However, they cannot precede the relative pronouns in the restrictive relatives as shown in (49).

- (49) a. Je kono chele ...
 who any boy

- b. Je kono boi ...
which any book
- c. Je səb chele ...
who all boys
- d. Je səb boi ...
which all books
- e. *kono Je chele ...
- f. *kono Je boi ...
- g. *səb Je chele ...
- h. *səb Je boi ...

However, non-specific determiners occur only in non-restrictive relatives, always preceding the head noun, as in (50).

- (50) a. kono chele ...
any boy
- b. səb chele ...
all boys
- c. kono boi ...
any book
- d. səb boi ...
all books

It should be noticed that no relative markers occur with non-specific determiners in restrictive or non-restrictive relative clauses if particles are inserted with the head

nouns (cf.51).

- (51) a. *Je kono cheleTa ...
 who any boy-the
- b. *Je səb cheleTa ...
 who all boy-the
- c. *kono cheleTa ...
 any boy-the
- d. *səb cheleTa ...
 all boy-the

However, plural suffixes can be added to the head nouns, as in (52):

- (52) a. Je səb cheleraa ...
 who all boys
- b. səb chelera/gulo
 all boys
- c. Je kono cheleraa ...
 who any boys
- d. kono cheleraa ...
 any boys
- e. Je səb chelegulo ...
 who all boys
- f. Je kono boigulo ...
 which any books

g. səb boigulo ...

all books

The following examples illustrate the occurrence of non-specific determiners in full sentences:

(53) a. Je kono chele e kaJ kore, se buddhiman

who any boy this work does he intelligent

tate kono səndeho nei

that-in any doubt not

'There is no doubt that any boy who does this sort of work is intelligent'

b. səb mee, Jara e kaJ kore, tara naritte

all girls who this work does they womanhood-in

bissasi

believe

'All the girls who do this sort of work believe in womanhood'

In all the examples correlatives replace the head nouns in the matrix sentences.

3.7.2 Specified Determiners

Specified determiners occur in both restrictive and non-restrictive relative clauses. Specified determiners are æk 'one/a', ækTa 'one/a', æ kJon 'one/a (person) (for human nouns only) and oi 'the'. In restrictive relative

clauses æ kJon 'one/a (person)' and oi 'the' must precede the head noun (cf.54).

(54) a. *æ kJon Je chele ...

a who boy

b. Je æ kJon chele ...

who a boy

c. Je æ kTa boi ...

which a book

d. oi Je cheleTa ...

the who boy-the

e. oi Je boiTa ...

the which book-the

f. *Je oi cheleTa ...

who the boy-the

g. *Je oi boiTa ...

which the book-the

It is clear from these examples (54a-g) that the specified determiners have the same restrictions as the non-specific determiners in restrictive relative clauses. The only difference is that the non-specific determiners do not allow any particle with the head nouns, whereas, oi 'the' does allow the relative marker with the head noun. The same applies in non-restrictive relative clauses where the particle can be inserted with the head noun when oi 'the' occurs before it (e.g. oi boiTa .. 'the book', oi cheleTa ...

'the boy'). However, when æ kJon 'a/one' or æ kTa 'one/a' occurs before the head nouns, it does not allow any particle insertion with the head noun. This may be shown in the following examples.

- (55) a. æ kJon chele, Je esechilo, se amar bondhu
 one/a boy who came he my friend
 'A boy who came is my friend'
- b. æ kTa boi, Ja tumi porcho, ta sꞑrotcꞑndrer
 a book which you reading that Saratchandra's
 'One of the books you are reading is by Saratchandra'

The specific determiners occur more naturally in non-restrictive relatives than in restrictive relatives because in the former they usually precede the antecedent (56a), though it may be used after the antecedent like the sentence mee æ kTa, Je khelche, se skuler chattri 'A girl who is playing is a school student'. In restrictive relatives, on the other hand, the postcedent always follows the specific determiner and the movement of it before the postcedent will yield ungrammatical sentences.

- (56) a. æ kJon mee, Je khelche, se skuler chattri
 a girl who playing she school-of student
 'A girl who is playing is a student of the school'
- b. *Je mee æ kTa khelche, se skuler chattri
- c. Je æ kTa lok esechilo, se amar bondhu
 who a man came he my friend

'A man who came is my friend'

æ kJon/æ kTa 'one/a' occurs in the non-restrictive relative clause in (56a) and restrictive relative in (56c).

3.7.3 Unique Determiners

Unique determiner is illustrated with Ø symbol for proper names in the relative clause. Proper names do not require any determiner for unique reference. Unique determiners (Ø) can be used only in non-restrictive relative clauses. The following examples show the use of the unique determiner in non-restrictive relative clause.

- (57) a. robindronath, Jini prokkhato kobi, tini nobel
 Rabindranath who famous poet he Nobel
 puroskar peechilen
 Prize received
 'Rabindranath, who is a famous poet, received the
 Nobel Prize'
- b. mœna, Je misTi mee, se amar bandhobi
 Moina who sweet girl she my girl-friend
 'Moina, who is a sweet girl, is my girl-friend'
- c. raJsahi, Ja pœddar tire œbosthito, ta
 Rajshahi which Padma's bank-on situated that
 æ kTa sundor sœhor
 a beautiful town

'Rajshahi, which is situated on the bank of
Padma, is a beautiful town'

In the above examples (57a-c), the non-restrictive use of the Unique determiners (\emptyset) is shown where Jini 'who' occurs in (57a), Je 'who' in (57b) and Ja 'which' in (57c). The relative pronouns are distributed in non-restrictive relatives according to rank and order (i.e. Jini 'who-honorific' after Rabindranath, Je 'who-neutral' after Moina (which could be honorific too), and Ja 'which-inanimate' after Rajshahi (inanimate proper noun)).

The occurrence of different determiners in Bengali relative clauses shows that they do not match with the proposed restrictiveness of Smith (1969). The following comparison shows the similarities and differences of the Bengali determiners against those of English as presented by Smith:

(58) <u>Smith (English)</u>	<u>Bengali</u>
a. Non-specific determiners occur only in restrictive relative clauses.	a. Non-Specific determiners occur in both restrictive and non-restrictive relative clauses
b. Specified determiners occur in both restrictive and non-restrictive relative clauses	b. Specified determiners occur in both restrictive and non-restrictive relative clauses

c. Unique determiners occur in non-restrictive relative clauses.

c. Unique determiners occur in non-restrictive relative clauses.

d. When non-specific determiners occur in restrictive and non-restrictive relative clauses, no particles are inserted with the head nouns.

e. Specified determiners like oi 'the/that' allow the insertion of particle with the head nouns in both restrictive and non-restrictive relative clauses.

That is, except the unique determiners, there are no specific determiners which occur exclusively either in restrictive or non-restrictive relative clauses. All the determiners except the unique determiners can occur both in restrictive and non-restrictive relative clauses, and Bengali relative clauses do not allow a distinction to be made between non-specific and specified determiners.

CHAPTER FOUR

Relativization and Different Sentence and Clause Types

4.0 Introductory

Apart from a consideration of the elements of relative pronouns, correlatives, postcedents, antecedents and determiners that occur in the construction of relative clauses, relative clauses can also be examined from the point of view of the way they allow this incorporation of different types of other clauses. The other types of clause which can play an important role in the relative clause constituents are the infinitive, participial and gerundive elements. When gerunds, infinitives and participials are introduced inside the relative clauses they produce different structures of relative clauses. We shall also be concerned with the question of whether gerunds, participles and infinitives can occur as the antecedent or the postcedent of a relative clause. This study will show how a relative clause allows gerundive, participial and infinitive elements in the relative clause and will discuss the difference resulting from the insertion of these elements. The discussion also includes the use of negatives and interrogation in the relativized sentences. The negative element na 'not' can occur finally in any sentence in Bengali. The different possibilities of negating a sentence are shown briefly in the following discussion.

4.1 Negatives and Interrogation

In Bengali, the normal way of negating a sentence is to add the negative particle in the predicate, but a negative particle may also be added medially to any sentence. The negative element na may occur either in medial or sentence-final position both in simple and complex sentences. The following examples are given to show the occurrence of na in medial and sentence-final positions showing the difference in affirmative, negative and interrogative sentences.

- (1) a. cheleTa gɔlpo likhto (Affirmative)
 boy-the story write
 'The boy did write stories'
- b. cheleTa gɔlpo likhto na (Negative)
 boy-the story write not
 'The boy did not write stories'
- c. cheleTa na gɔlop likhto? (Interrogative)
 boy-the not story write
 'Did not the boy write stories?'

In a negative sentence na occurs at the end of the sentence after a verb (1b), and it occurs before a verb in an interrogative sentence.

When negation is introduced in a relative sentence, it may occur either in the relative clause or in the matrix sentence or in both at the end of the clause. When a negative element occurs in the relative clause, it negates

the meaning only of the relative clause and vice versa. It has already been mentioned that the 'being' verb in Bengali may remain absent in the present tense (cf.1.2.5.3). However, when a negative particle occurs in a sentence the presence of a verb is necessary as no negative particle usually occurs in a sentence without any verb. There are two negative particles which may occur in a sentence, namely na 'not' and nɔe 'not'. Both of these particles can occur either medially or at the end of a sentence. The difference in the occurrence of na and nɔe is that the former occurs after the verb, whereas the latter occurs with a being verb (cf.1.2.3). na may also take the morphological form of ni when a contrast is made in tense between present and past: compare se bhat khae na 'he does not eat rice' and se bhat khaeni 'he did not eat rice'. The following sentences provide further exemplification of this use of negative elements:

- (2) a. Je cheleTa sɔkale eseche, se æ khon
 who boy-the morning-in-the come-has he now
 Jabe na
 go-will not
 'Who the boy has come in the morning will not go
 now'
 ['The boy who has come in the morning will not go
 now']
- b. Je cheleTa boi porche na, se amar bondhu
 who boy-the book reading not he my friend

'Who the boy is not reading a book is my friend'

['The boy who is not reading a book is my friend']

c. Je meeTa nachche, se bhalo nrittosilpi nɔe

who girl-the dancing she good dance-artist not

'Who the girl is dancing is not a good dancer'

['The girl who is dancing is not a good dancer']

In (2a-b), the regular pattern of adding negation is shown which occurs at the end of the clause. na occurs at the end of the matrix sentence in (2a) and negates the meaning only of the matrix sentence and the relative clause stands as an affirmative clause. na occurs at the end of the relative clause in (2b) and negates only of the relative clause. nɔe occurs at the end of the matrix sentence in (2c) and negates it. One point that should be clarified here is that though both of the negative particles occur to the end of the clause, they show some difference. na only occurs after the verb to negate it, but nɔe incorporates within itself both verb ('being') and negative. (2c) shows the occurrence of nɔe after the noun. The occurrence of nɔe shows that it occurs in the complement sentence with the 'being' verb and na occurs after the main verb. It should also be mentioned here that na also occurs in a sentence initial position in the context of discourse e.g. na, Je cheleTa sɔkale eseche, se ækhon Jabe 'No the boy who has come in the morning will go now'. However, sentences with initial negation will not be treated here as the discourse analysis is outside the scope of the present study.

Both the negative elements na and nə can occur in restrictive or non-restrictive relatives, but sometimes na functions not as a negative particle but as a question marker. Compare the following sentences where na occurs as a question marker.

- (3) a. se cheleTa na esechilo, Je gɔlpo likhto?
 he boy-the not came who story write
 'Is not the boy who came the one who used to write stories?'
- b. Je gɔlpo likhto, se cheleTa na esechilo?
 who story write he boy-the not came
 'Is not the boy who writes stories the one who came?'
- c. Je cheleTa gɔlpo likhto na, se esechilo?
 who boy-the story write not he came
 'Did not the boy who used to write stories come?'
- d. meeTa, Je khelche, se na tomar bon?
 girl-the who playing she not your sister
 'Is not the girl who is playing your sister?'
- e. meeTa, Je tomar bon, se na khelche?
 girl-the who your sister she not playing
 'Is not the girl who is your sister playing?'

It is quite clear from the above examples that a negative element can be used in a clause or in a sentence to serve two purposes. It may occur either as a negative particle

or as a question marker in an interrogative sentence. When na negates a clause in a relativized sentence it may occur either in the relative clause or in the matrix sentence after a verb (3c) and when it is used as a question marker it occurs in the matrix sentence, preferably before a verb (3a, b, e). An exception on the occurrence of a negative particle can be seen in (3d) where no verb occurs in the matrix sentence after na. It may be said that though there is no verb in the surface structure, the verb hæe 'is' present in the deep structure of the sentence. In the colloquial pattern of Bengali occasionally a 'being' verb in present tense does not occur (cf. 1.2.5.3). Moreover, the meaning of (3a) and (3b) is quite different. More emphasis is given on the coming of the boy in (3a), whereas the emphasis is given on writing of stories in (3b). One point that may also be mentioned here is that occasionally an interrogative sentence may occur with the negative element at the end of the sentence. The difference between this type of interrogative sentence and a sentence without any question mark is that more stress is given on the constituents that occur before the negative element. Consider (4).

- (4) a. Je gɔlpo likhto na, se cheleTa esechilo
 who story write not he boy-the came
 'Who the boy did not write stories came'
 ['The boy who did not write stories came']

b. Je gɔlpo likhto na, se cheleTa esechilo?

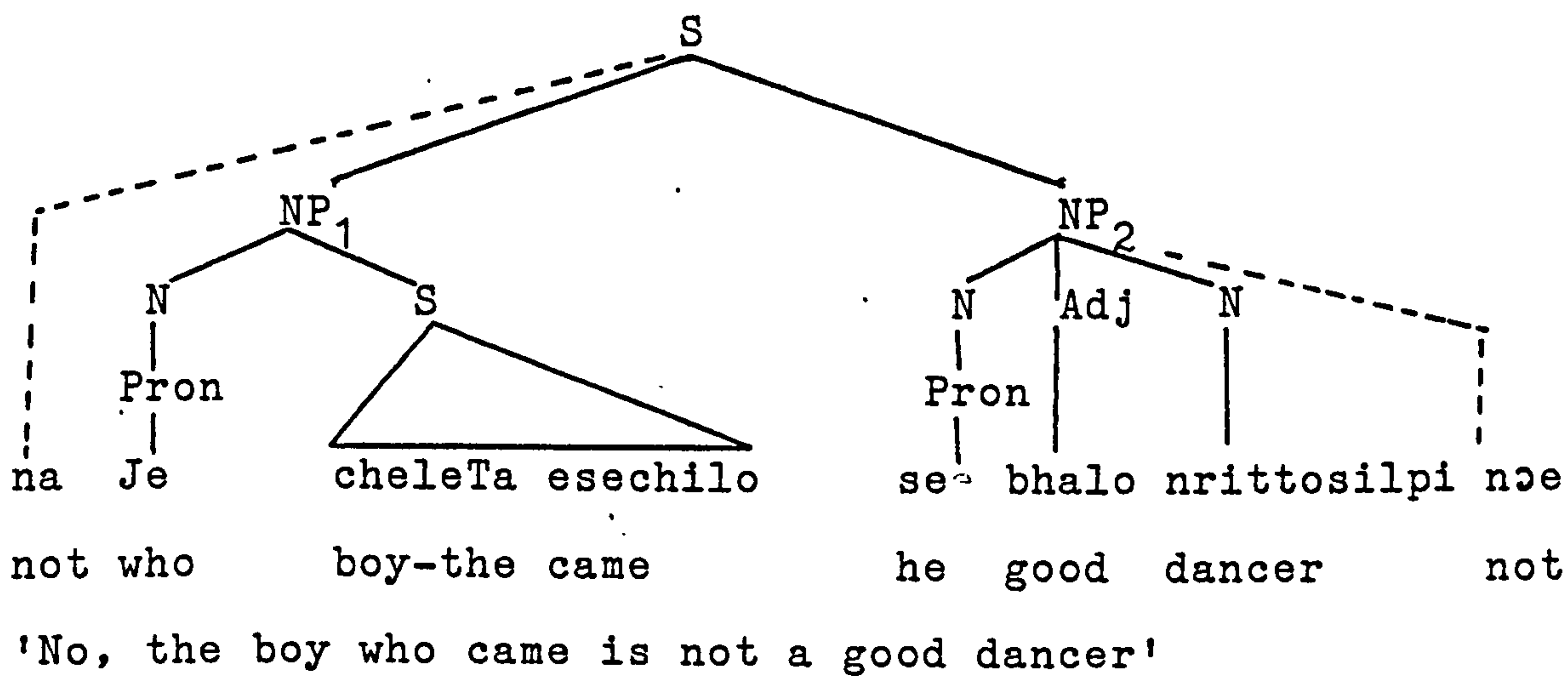
who story write not he boy-the came

'Did the boy come who did not write stories?'

There exists no extra stress on se cheleTa in (4a) and the sentence is constituted only with a negative element na to negate the relative clause. On the other hand, a heavy stress falls on se cheleTa in (4b) which in turn becomes an interrogative sentence. This is also a common pattern in Bengali to mark questions.

The phrase structure rule for inserting negative elements in a sentence may be shown in the following tree-diagram.

(4)



4.2 Infinitive, Gerundive and Participial Constructions

The infinitive, gerundive and participial constructions can also be introduced in the relative clause in Bengali. A brief discussion is made in the following section on the occurrence of infinitive, gerundive and participial forms in the relative clauses.

4.2.1 Infinitive Construction

In Bengali, the infinitive form of the verb, which is part of a three-way apposition involving participles and gerunds, is constructed with non-finite verbs by adding the suffix -te 'to' to the verbal root. That is to say that infinitives are marked morphologically in Bengali, as are gerunds and participles. The following discussion looks at the construction of infinitives, the occurrence of infinitives in simple sentences and in relative clauses, and closes with a general statement on the infinitive.

As has been already mentioned, infinitives are constructed by adding -te 'to' to the verbal roots. This sometimes involves a morphophonemic change in the form of the root. The following examples are given to show the formation of the Bengali infinitives.

- (5) a. Verbal root Ja 'go' + -te 'to' : Jete 'to go'
 b. Verbal root kha 'eat' + -te 'to' : khete 'to eat'
 c. Verbal root cai 'want' + -te 'to' : caite 'to want'

- d. Verbal root naoa 'bathe' + -te 'to' : naite 'to bathe'
- e. Verbal root ni 'take' + -te 'to' : nite 'to take'
- f. Verbal root di 'give' + -te 'to' : dite 'to give'
- g. Verbal root har 'lose' + -te 'to' : harte 'to lose'
- h. Verbal root Jit 'win' + -te 'to' : Jitte 'to win'

When an infinitive is used in a sentence, the finite or any other verb (non-finite) always occurs after it, preferably at the end of the sentence (Bengali being a SOV language). The following examples are given to show infinitives in non-relativized sentences.

- (6) a. se barite Jete₁ cae₂
 he home-to go-to wants
 'He wants to go home'
- b. se amake æ kTa boi dite₁ cae₂
 he me a book give-to wants
 'He wants to give me a book'
- c. se bhat khete₁ pachondo kore₂
 he rice eat-to like does
 'He likes to eat rice'
- d. se æ khon bichane sute₁ Jabe₂
 he now bed-in lie-to go-will
 'He will go now to lie down in bed'
- e. se naite₁ khete₁ deri korche₂
 he bath-to eat-to late doing
 'He is late in taking a bath and eating'

The above examples show the distribution of the infinitives in non-relativized sentences. The infinitive and non-infinitive verbs are shown underlined as 1 and 2. In (6e) two infinitives occur; this is a common structure in Bengali.

Infinitives may occur with or without objects.

The following examples are given to show the occurrence of infinitives with and without objects.

- (7) a. mou baJate Jane
 Mou play-to knows
 'Mou knows how to play'
- á. mou bāsi baJate Jane
 Mou flute play-to knows
 'Mou knows how to play the flute'
- b. mohua poRte pare
 Mohua read-to can
 'Mohua can read'
- b̃. mohua boi poRte pare
 'Mohua book read-to can
 'Mohua can read books'
- c. se ākte pare
 he draw-to can
 'He knows how to draw'
- c̃. se chobi ākte pare
 he picture draw-to can
 'He knows how to draw pictures'

The (a, b, c) sentences in (7) are shown without objects, whereas the (á, b̃, c̃) sentences show the occurrence of objects before the infinitives. The finite verbs occur at the end of the sentences in (7).

It is important to note that though participial (see 4.2.3) and infinitive constructions have the same meaning, not all infinitival constructions can be converted to participial constructions. The following examples illustrate the parallelism between infinitival and participial constructions as well as the restrictions on the conversion of infinitival constructions into participial constructions.

- (8) a. se okhane Jete p̃chondo k̃re na
 he there go-to like does not
 'He does not like to go there'
- á. se okhane Jaoa p̃chondo k̃re na
 he there going like does not
 'He does not like going there'
- b. se bhat khete p̃chondo k̃re
 he rice eat-to like does
 'He likes to eat rice'
- b̃. se bhat khaoa p̃chondo k̃re
 he rice eating like does
 'He likes eating rice'
- c. se ekTu p̃re sute Jabe
 he little after lie-to go-will
 'He will go to bed shortly to lie down'

ć. *se ekTu pɔre soaa Jabe
 he little after lying go-will
 'He will go to bed shortly for lying down'

d. se amake æ kTa boi dite cae
 he me a book give-to wants
 'He wants to give me a book'

đ. *se amake æ kTa boi deoa cae
 he me a book giving wants
 'He wants of giving me a book'
 ['He wants to give me a book']

In the above examples (8ć) and (8đ) show the non-acceptability in some environments of substituting participials for infinitives.

Infinitives can easily be introduced in the relative clause without affecting the word order sequences that are shown for simple sentences in (8). Consider (9):

(9) a. bhɔddrolok, Jini grame Jete can na, tini
 gentleman who village-in go-to wants not he
 æ khon boi porchen
 now book reading
 'The gentleman, who does not like to go to the village, is reading a book now'

b. cheleTa, Je mach khete pɔchondo kɔre na, se bɔl
 boy-the who fish eat-to like does not he ball
 khelche
 playing

'The boy, who does not like to eat fish, is playing ball'

c. mou, Je bāsi baJate pare, se amar s̥hopaThi
 Mou who flute play-to can she my class-friend
 'Mou, who knows how to play flute, is my class-friend'

d. mou, Je baJate pare, se amar s̥hopaThi
 Mou who play-to can she my class-friend
 'Mou, who knows how to play, is my class-friend'

In the above examples, the occurrence of an object is shown in (9b, c), whereas, (9a, d) do not show the occurrence of an object before the infinitives. Sentences like (9a-d) show that infinitives can be introduced in the relative clause with or without objects like the non-relativized sentences.

4.2.2 Gerundive Construction

A gerund can be taken as a verbal noun. The gerund may or may not take an object in a sentence. When it takes an object, the latter follows it. The most common suffix that shows gerund formation is -bar '-ing'. The following examples are given to show gerundive formation in Bengali.

(10) Verbal root + Suffix

- a. por + bar : porbar 'reading'
- b. bhab + bar : bhabbar 'thinking'
- c. dāra + bar : dārabar 'standing'
- d. Ja + bar : Jabar 'going'
- e. kha + bar : khabar 'eating'
- f. kor + bar : korbar 'doing'
- g. sun + bar : sunbar 'listening'

The suffix -bar can be taken as equivalent to English -ing. It should be mentioned here that the gerunds are used in Bengali written form following the Sanskrit grammatical pattern and are not generally used in colloquial Bengali. Another gerund form used in the written style is illustrated in (11).

- (11) a. p̣ara - p̣aron 'study - studying'
- b. bhaba - bhabon 'think - thinking'
- c. ḳara - ḳaron 'do - doing'
- d. c̣ara - c̣aron 'climb - climbing'

Occasionally gerunds are formed in Bengali without the addition of a suffix; e.g. dhumpan 'smoking', p̣arasuna 'studying'. The following examples show the occurrence of gerundive constructions in a sentence.

- (12) a. ami tomar porbar aggroho dekhechi
 I you reading eagerness seen-have
 'I have seen your eagerness in reading'
- b. ei sinema hōle dhumpan nisiddho
 this cinema hall-in smoking prohibited
 'Smoking is prohibited in this theatre'
- c. tumi rādhbar aoJon korte paro
 you cooking arrangement do can
 'You can make the arrangement for cooking'

Besides the occurrence of gerunds in a simple sentence, they may also be introduced in a relative clause. There are two possibilities of introducing gerunds in relative clauses. Either they can occur as the antecedents of relative clauses or they can occur inside the relative clauses as clause constituents. When gerunds function as antecedents, they have a fixed position before the relative clause. However, when they occur inside the relative clause, they may be interpreted in different ways with or without objects, or other constituents including the relative pronoun which may precede or follow them. The following examples are given to show the occurrence of gerunds in relativized sentences.

- (13) a. sinema hōler moddhe dhumpan, Ja nisiddho,
 cinema hall's inside smoking which prohibited
 ta sōbar mana ucit
 that all's obey proper

'Smoking, which is prohibited inside the theatre,
should properly be obeyed by all

['All should properly obey the rule that smoking
is prohibited inside the auditorium']

- b. amar p̄rasuna, Ja ami niomito korchine, ta
my studying which I regularly doing not that
amake bipode phelte pare
me difficulties put-in can
'My studying, which I am not doing regularly, put
me in difficulties'

- (14) a. amar bondhu, Je dhumpan charthe cae na, se
my friend who smoking quit-to wants not he
roJ du paekeT sigareT khae
everyday two packet cigarette smokes
'My friend, who does not like to stop smoking,
smokes two packets of cigarettes every day'

- b. amar bondhu, Je sinema hole sigareT dhumpan
my friend who cinema hall-in cigarette smoking
nisiddho ei nirdes mane na, se ækhon khelte
prohibited this order obeys not he now play-to
gæ che
gone-has
'My friend, who does not like to obey the order
"smoking is prohibited" in the cinema hall, has
gone to play now'

- c. bhōddrolōk, Jini rādhbar aoJon korechilen,
gentleman who cooking arrangement did

tini amar bondhu

he my friend

'The gentleman, who made arrangements for cooking,
is my friend'

The gerunds are shown as the antecedents in (13a) and (13b), where dhumpan 'smoking' and p̥rasuna 'studying' occur before the relative clauses.

The gerund in relative clauses can be viewed from different syntactic standpoints. It can be treated as a verbal noun in the possessive case and may be followed by a postposition. This is shown in (15).

- (15) a. bhaddrolak, Jini porbar Jonne esechilen, tini
gentleman who reading for came he
amar bondhu
my friend
'The gentleman, who came for reading, is my friend'
- b. cheleTa, Je dekhbar Jonne esече, se amar
boy-the who seeing for come-has he my
səhopaThi
class-friend
'The boy, who has come for seeing, is my class-
friend'

The postposition Jonne 'for' occurs after the gerund in (15a) and (15b).

4.2.3 Participial Construction

In the gerundive construction a verb functions as a noun, whereas in the participial construction a verb functions as an adjective. A word used in English phrase like 'smoking' in 'a smoking cigarette' can be taken as participle. The most common suffix which is added to the verb to form participles is -ito. The noun which occurs after the participle is modified by it. The participles cannot be constructed without any nouns after it in Bengali. The following examples are given to show the participial forms in Bengali.

(16) Verbal Word + Suffix : Participials

- | | | | |
|----|----------|---------|---------------------|
| a. | ꣳꣳkon | + ito : | ꣳꣳkito 'drawn' |
| b. | pꣳton | + ito : | potito 'fallen' |
| c. | dꣳnDo | + ito : | donDito 'punished' |
| d. | bhꣳe | + ito : | bhito 'afraid' |
| e. | sꣳon | + ito : | saifo 'lying' |
| f. | prohar | + ito : | prohrito 'beaten' |
| g. | lekha | + ito : | likhito 'written' |
| h. | bohiskar | + ito : | bohiskrito 'driven' |
| i. | gꣳThon | + ito : | goThito 'made' |
| j. | pꣳThon | + ito : | poThito 'read' |
| k. | gona | + ito : | gonito 'counted' |
| l. | hasso | + mꣳe : | hassomꣳe 'laughing' |

Participle formation is illustrated in the above examples. The common suffix which is shown to form the participles is -ito. One example (161) is shown with the suffix -mje. The verbal roots changed slightly after the addition of -ito and -mje. It can be said that when a suffix is added to a word, the original word does not retain all the sounds due to sandhi rule in Bengali. However, it is not difficult to establish the rule for changing the sounds of the base words. In most cases, the second syllable is deleted after adding the suffix (e.g. *ɔŋkon* (minus *-on*) + *ito* : *ɔŋkito*). The following examples are given to illustrate the introduction of participles in relativized sentences.

- (17) a. *tomar ɔŋkito chobi, Ja prodorsonite sobar*
 your drawn painting which exhibition-in all's
 prosonsa peeche, ta ami dekhechi
 commendation received that I seen-have
 'I have seen your drawn paintings which have
 received commendation in the exhibition by all'
 ['I have seen the paintings which have been drawn
 by you and have received commendation in the
 exhibition by all']
- b. *habiber potit Jomi, Ja sabhare ache, ta*
 Habib's uncultivated land which Savar-in is that
 ami kinte cai
 I buy-to want
 'I want to buy Habib's uncultivated land in Savar'

- (18) a. bhəddrolək, Jini bichane sajito, tini amader
gentleman who bed-in lying he our
āttio
relative
'The gentleman, who is lying down in bed, is our
relative'
- b. hasnat, Je prohrito lokTake bāciechilo, se
Hasnat who beaten man-of-the saved he
amader poricito
our known
'Hasnat is known to us who saved the beaten man'

In (17), the participles are shown before the antecedents of the relative clause, where the noun follows the participles before the relative clause. In the examples in (18) the participial sajito 'lying' is preceded by a noun.

(18b) illustrates the regular pattern of the relative clause where a noun occurs after the participial as shown previously in (17a) and (17b). Examples like (18a) cannot be taken as a true participle construction as the participle does not modify the noun like likhito ciThi 'written letter' or onkito chobi 'drawn painting'. It should be mentioned here that participle constructions like likhito ciThi 'written letter' can be regarded as a reduced relative clause, related to a regular relative clause like Je ciThi lekha hoechilo 'The letter which was written'. The NP can be taken as the head noun of the relative clause. When two or more participles occur in a relative clause they can constitute a stacked relative (cf.2.1.9).

CHAPTER FIVE

Complement Constructions in Bengali: Complementizers and Complement Clauses

5.0 Introductory

The structure of complement clauses is discussed in this chapter from two perspectives: (a) the way in which complement clauses show contrast with relative constructions; and (b) the distribution of Je in the complement clauses besides the occurrence of the Gerundive and Infinitive complementizers. It has already been mentioned (cf.3.4.1) that Je has three functions in Bengali: as a relative pronoun, as a deictic marker and as a complementizer. In the present discussion, more emphasis is given on the construction of the clause complementizer Je, as it is more common than Gerundive and Infinitive complementizers in Bengali.

5.1 Different Types of Je

Complement sentences embedded in a matrix sentence are marked by complementizers, as in (1).

- (1) a. ami Jantam Je lokTa lamba
 I knew that man-the tall
 'I knew that the man was tall'
- á. ami Jantam Je - lokTa lamba, se esechilo
 I knew who man-the tall he came
 'I knew the man who was tall came'
- b. lokTa Je lamba, ta ami Jantam
 man-the that tall that I knew
 'That the man was tall I knew'
- b. lokTa, Je lamba, se esehcilo
 man-the who tall he came
 'The man, who was tall, came'

In (1a), the complementizer Je 'that' precedes the embedded sentence, whereas it is in medial position in the embedded sentence in (1b). Complement sentences like the relative sentences can also show the use of the correlative in the matrix sentence. However, only ta 'that' occurs as a correlative in the complement sentence. The occurrence of Je 'that' in initial (1a) and medial positions (1b) of any embedded sentence in Bengali can be explained from two different standpoints which may be stated in the following way. If Je 'that' occurs initially in the complement sentence (1a), it functions as a complementizer as it does

not show any close juncture with the head noun, e.g. with clause order (1á), Je must be a complementizer. Je 'who' occurs as a deictic relative pronoun in (1á) as Je shows the close juncture with the postcedent lokTa 'the man', e.g. with clause order (1a), if we have Je lokTa lmba, Je must be a relative pronoun. lokTa Je lmba 'that the man is tall' in (1b) can be analysed as a complement clause as there exists no potential pause between lokTa and Je. lokTa, Je lmba 'the man, who is tall' in (2b) can be taken as a relative clause and Je 'who' as a relative pronoun as the potential pause falls after lokTa 'the man', e.g. if we have the sequence lokTa Je lmba, Je can be either complementizer or relative pronoun, depending on pauses after Je. It should be mentioned here that the complementizer Je 'that' is omitted in (1a), though it may occur before the relative clause like the sentence ami Jantam Je Je-lokTa lmba, se esechilo 'I knew that the man who was tall came' (cf.32d). These points (cf.2.1.2) may be stated in the following way:

(2) a. Je 'who' as a Deictic Relative Pronoun

If Je occurs initially in any clause preceding the postcedent and no potential pause exists between them.

Je - lokTa lmba, se amar bondhu
who man-the tall he my friend

'Who-the man is tall is my friend'

['The man who is tall is my friend']

b. Je 'who' as a non-deictic Relative Pronoun

If Je occurs after the antecedent in any clause with a potential pause in between the antecedent and Je.

lokTa, Je lɔmba, se amar bondhu
 man-the who tall he my friend
 'The man, who is tall, is my friend'

c. Je 'that' as a Clause Complementizer

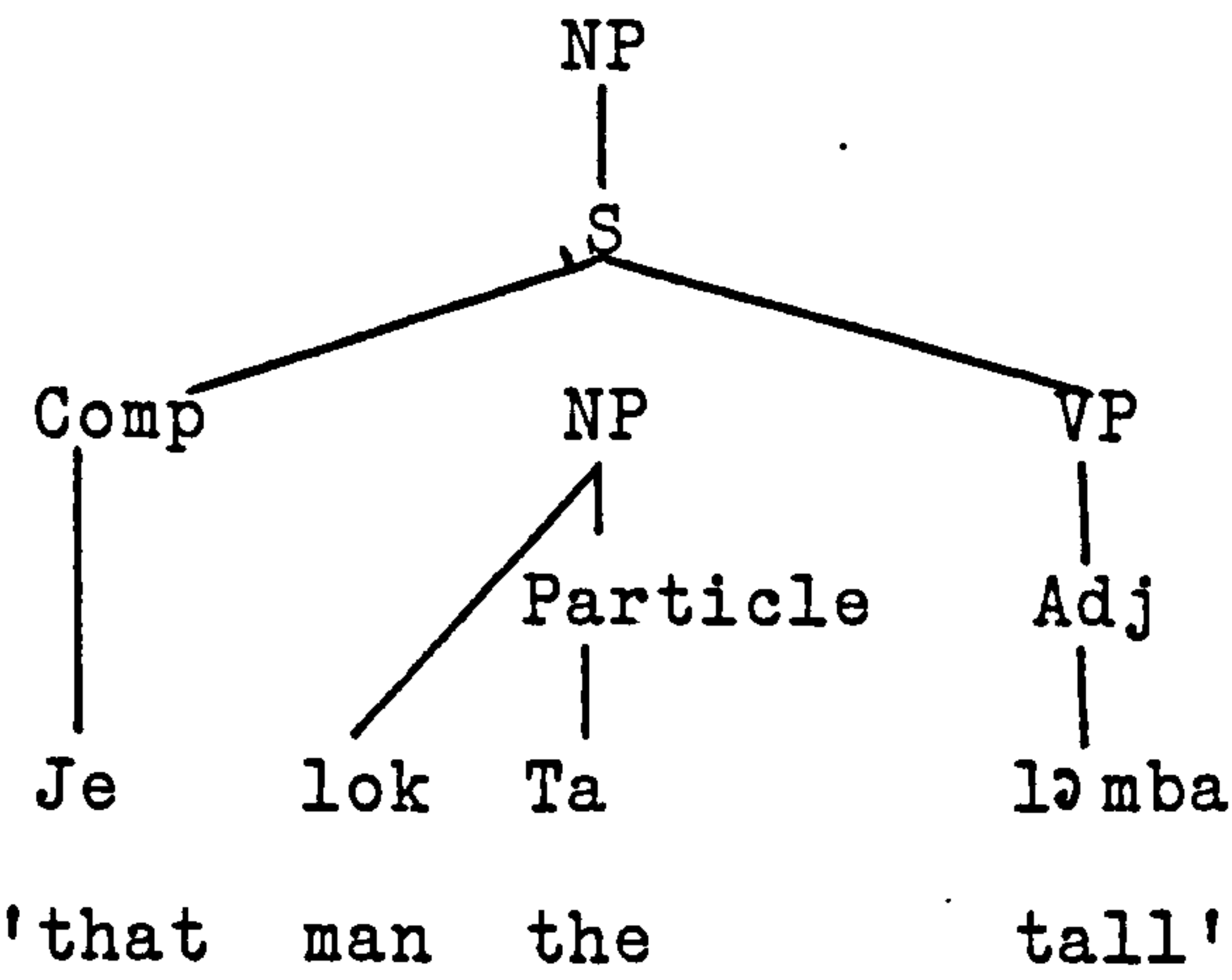
If Je occurs after the head noun in complement clause and no potential pause exists between the head noun and Je.

lokTa Je lɔmba ta ami Jani
 man-the that tall that I know
 'That the man is tall that I know'

The correlatives in relative clauses vary with the structure of the relative pronouns (e.g. Je - se 'who-he', Jini-tini 'who-he', Ja-ta 'what-that') but the correlative in complement sentence is always the same (e.g. ta 'that'). (2) shows the difference between relative (both in deictic and in non-deictic) and complement clauses in Bengali which include Je in the clause. The examples of occurrence of Je 'that' in the complement sentence indicate that it occurs in clause-initial or clause-medial position. When it occurs initially in an embedded sentence the matrix sentence occurs before the embedded sentence (1a) and when it occurs medially in an embedded sentence, the matrix sentence occurs

after the embedded sentence (1b). Moreover, the position of the complementizers in a sentence is determined by the phrase structure rules of a language (Bresnan, 1970: 319). Je lokTa lɔmba 'that the man is tall' is the embedded sentence that occurs in ami jantam je lokTa lɔmba 'I knew that the man was tall'. The phrase structure diagram of the embedded sentence (1) can be represented in the following way:

(3)



The verb-phrase node can also be extended either as a verb or noun plus verb depending on the structure of the sentence.

5.2 Different Types of Complementizer

Of the three complementizers that are used in the complement sentence in English two consist of two items and have a different distribution from 'that'. The three are: 'that', 'for-to' and 's-ing'. These are shown in the following examples:

- (4) a. That Susan gave me a present was a big surprise
 b. For Susan to give me a present was a big surprise
 c. Susan's s giving me a present was a big surprise

Bengali complement sentences also allow three complementizers with their structural differences. The three complementizers are:

- (5) a. Je 'that': Clause Complementizer
 b. Jonne/pokkhe - e/o/te 'for-to': Infinitive Complementizer
 c. Poss (er) - te: Gerundive Complementizer

Je 'that' is commonly used as a linking part of the complement. Jonne/pokkhe - e/o/te 'for-to' is regarded as the Infinitive Complementizer, as the verb in the clause occurs in the infinitive form. Poss (er) - te acts as a Gerundive Complementizer as the complementizer functions as a noun. Usually, te 'ing' is added to the verbal form that occurs after the noun phrase. Among these three complementizers Je 'that' is the most common, and Poss (er) - te

'Poss-ing' occurs more frequently than Jonne/pokkhe - e/o/te 'for-to'. e/o/te, the last element in the Infinitive Complementizer, is a bound form, as contrasted with 'to' in English. It is nevertheless closely comparable with 'to' as regards its grammatical function. Poss (er) - te corresponds very closely to the English complementizer Poss. -ing. When pokkhe/Jonne - e/o/te 'for-to' occurs in the complement sentence, pokkhe/Jonne 'for' can occur either before a noun or a pronoun. The following examples are given to show the use of the Bengali complementizers.

- (6) a. sahana Je amader upohar diechilo tate amra
 Sahana that us present gave that-in we
 obak hoeechilam
 surprise became

'That Sahana gave us a present was a surprise to us'

- b. sahana bolechilo Je se asbe
 Sahana said that she come-will
 'Sahana said that she will come'

- (7) tomar pokkhe upohar deoate jodi osubidha
 your for present giving-to if inconvenience
 hae tahole khali hatei eso
 has then empty hand-in come
 'If there is any inconvenience for you to give a present, come without it'

- (8) a. mouer b^{ol} khaeae amra bissito hoeechilam
 Mou's ball playing we surprise became
 'Mou's playing ball surprised us'
- b. tomar boi p^{orae} amra ^{obak} hoeechilam
 your book reading we surprise became
 'Your reading the book surprised us'

pokkhe occurs after a noun or a pronoun and e/o/te after a verb. When e/o/te is added to a verb, the verbal structure changes due to the inflectional pattern of a word (cf.4.2.1). When Poss-te is used in a complementing construction, it occurs in clause-initial or clause-medial position. When Poss (er) - te occurs as a complementizer, the possessive marker occurs either with the noun or the pronoun, and -te 'ing' occurs with the verb. The second element in Infinitive Complmentizer e/o/te is used after any free morpheme with a range of meanings: 'with/in/at/to/by'. It should be mentioned here that the possessive marker -er occurs with nouns, while pronouns take -or or -er. In the examples in (8), -e ('ing') occurs with the verb and the object precedes it, and the main verb occurs at the end of the sentence. The following examples are given to show the occurrence of infinitive and gerundive Complementizers in Bengali.

- (9) a. m^{oenar} pokkhe e kaJ kara ^{osubidha}, ta
 Moina's for this work do-to inconvenience that
 sobai Janto
 all knew

'For Moina to do this work was an inconvenience
knew all' (lit)

b. naelar boi upohare amra bissito hoeechilam
Naila's book presenting we surprise became
'Naila's presenting of the book surprised us'

c. tomar boi upohare sabai bissito hoeechilo
your book presenting all surprise became
'Your presenting the book surprised all'

The occurrence of Je 'that' complementizer is shown in the following examples.

- (10) a. mou Janto Je akas nil, ta Thik
Mou knew that sky blue that true
'Mou knew that is true that the sky is blue'
- b. mou Janto Je se bhat khachche, ta Thik
Mou knew that she rice eating that true
'Mou knew that it is true that she is eating rice'
- c. roJi Janto Je se miththebadi, ta sotti noe
Rosy knew that she liar that true not
'Rosy knew that is not true that she is a liar'
- d. mou Janto Je aJ brISTi hobe, ta Thik noe
Mou knew that today rain be-will that true not
'Mou knew that it was not true that it will rain
today'
- e. sahana Janto Je se bhalobaste pare na, e
Sahana knew that she love-to can not this

kotha sotti nɔe

word true not

'Sahana knew that it was not true that she cannot love'

The examples given in (10) show double embedding of the complement clauses. The sentences in (10) show that two complement clauses (one complement clause in another complement clause) are embedded in the matrix sentence (which occurs at the end of the sentence). The double embedding of complement clauses will not be explained here as a further example is given in (32). However, it is worth mentioning here that the complement clauses can be single embedded (cf.11) or double embedded (cf.10) depending on the structure of a conjoined sentence in Bengali. Occurrences of clauses are shown in the complement construction in (10). When Je 'that' occurs as a complementizer in the complement sentence, the clause types may also be seen as in (11).

(11) a. rosi Je boka, ta amra Jantam

Rosy that fool that we knew

'That Rosy is a fool we knew'

['We knew that Rosy is a fool']

b. se Je calak, ta amra Jantam

he that clever that we knew

'We knew that he is clever'

- c. mɛna Je tomar bon, ta amra Jantam na
 Moina that your sister that we knew not
 'We did not know that Moina is your sister'

Je 'that' is commonly placed before the complement sentence and never after it. As Je 'that' occurs immediately before the complement sentence, it may be taken as part of the complement sentence like: ... Je prithibi kɔmla lebur moto gol 'that the world is round like an orange' in the sentence such as: mou e kɔtha cinta kore bissito hoeechilo Je prithibi kɔmla lebur moto gol 'Mou got surprised after thinking that the world is round like an orange'.

Je may occur as a relative pronoun and as a clause complementizer, as described previously in (1). It should also be mentioned here that both types of Je can occur in the same sentence, this is also shown in (12).

- (12) a. mɛna Janto Je Je-mou boi porche, se skuler
 Moina knew that who-Mou book reading she school-of
 chattri
 student

'Moina knew that who Mou is reading a book is a school student'

['Moina knew that Mou who is reading a book is a school student']

In (12a), the first Je occurs as a complementizer in the

complement sentence Je-mou boi porche 'who-Mou is reading a book', which itself is a deictic relative clause. Je 'that' occurs as a clause complementizer of the above clause in (12a) as Je Je mou boi porche 'that Mou is reading a book'. It should be mentioned here that complementizer Je 'that' and deictic relative pronoun Je 'who' cannot be confused with double relatives in Bengali when they occur side by side as in (12a). It is already shown (cf. 3.2) that occasionally Je Je 'who who' (who-pl) occurs in Bengali to mark plurality. When Je Je occurs as a plural morpheme, it may occur either inside or initially to any relative clause. When it occurs initially, it may occur either before the postcedent (Je Je lok esechilo 'who-pl men came') or after the antecedent (bhoddrolak, Jini Jini esechilen 'The gentlemen, who-pl came') of the relative clause. When Je Je occurs either before the postcedent or after the antecedent, it always shows close juncture between the two Je (Je + Je: Je Je). When Je 'that' occurs as a complementizer before any deictic relative pronoun, the former is separated from the complement or deictic relative clause with a slight pause: mœna Janto Je | Je-mou boi porche, se skuler chattri 'Moina knew that | who-Mou is reading a book, is a school student'. No such pause is perceivable in between Je Je 'who-pl' when it occurs as a plural morpheme. Sentences like (12a) are not unlike certain English constructions, as shown in (12b).

- (12) b. Moina knew that the book that is on the table
comp Rel Clause
belongs to Mou.

The first 'that' in (12b) is a complementizer, whereas, the latter is a relative pronoun.

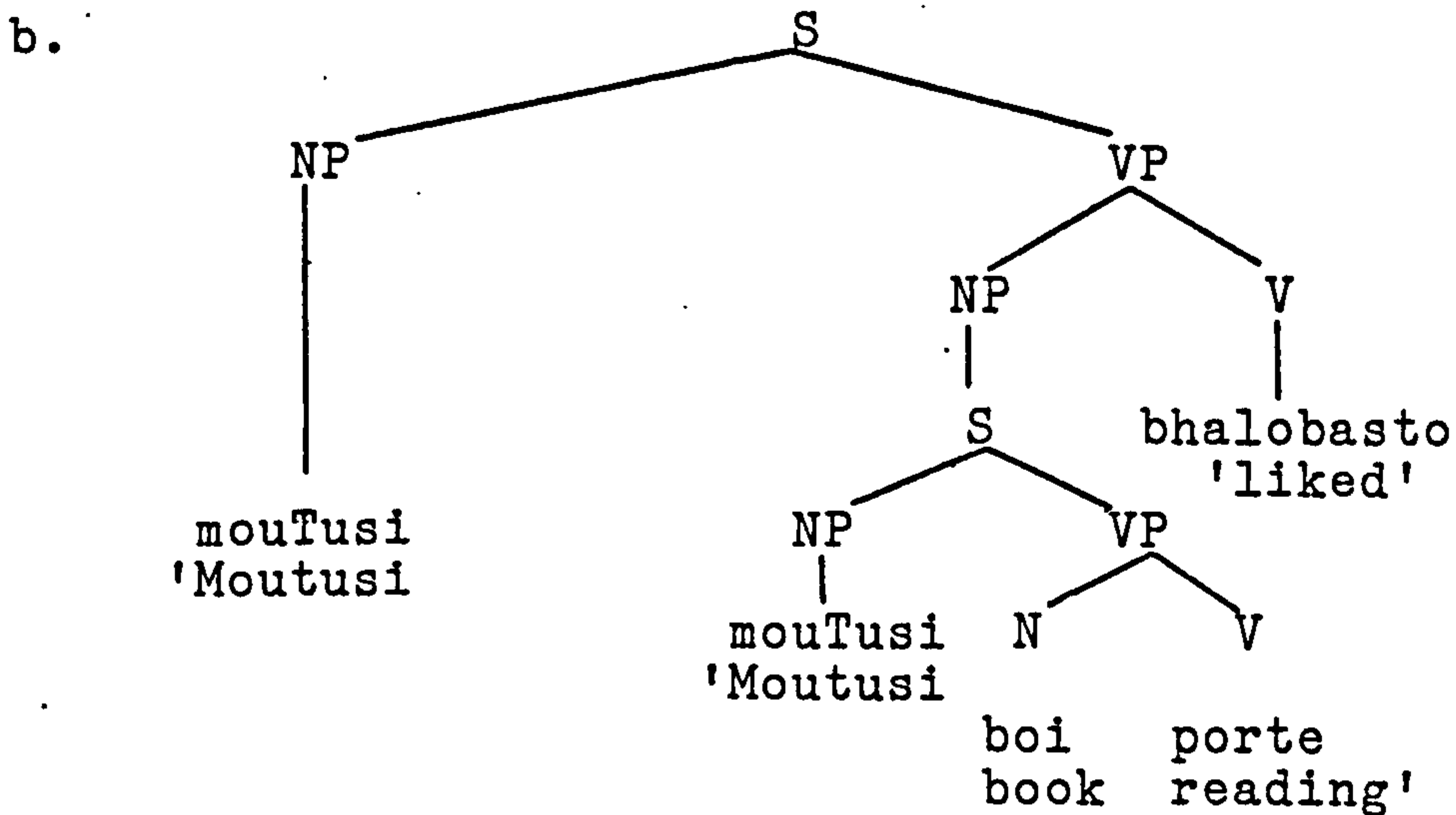
It should be mentioned here that though the sequence of Je Je in (12a) does not show the occurrence of the double relatives, the latter may occur after the clause complementizer Je 'that', as shown in (12c):

- (12) c. ami Jantan Je Je Je esechilo, se se cole
 I knew that who who came he he gone
 gæ che
 have
 'I knew that they who came have gone'

5.3 Noun Phrase and Verb Phrase Complements

The verb complement in Bengali usually occurs at the end of the sentence following the verb. When a sentence is embedded in the verb phrase, it may be taken as a verb phrase complement. However, the subject noun phrase that occurs in the verb phrase complement is identical to a noun phrase in the matrix sentence. This may be shown in the following example:

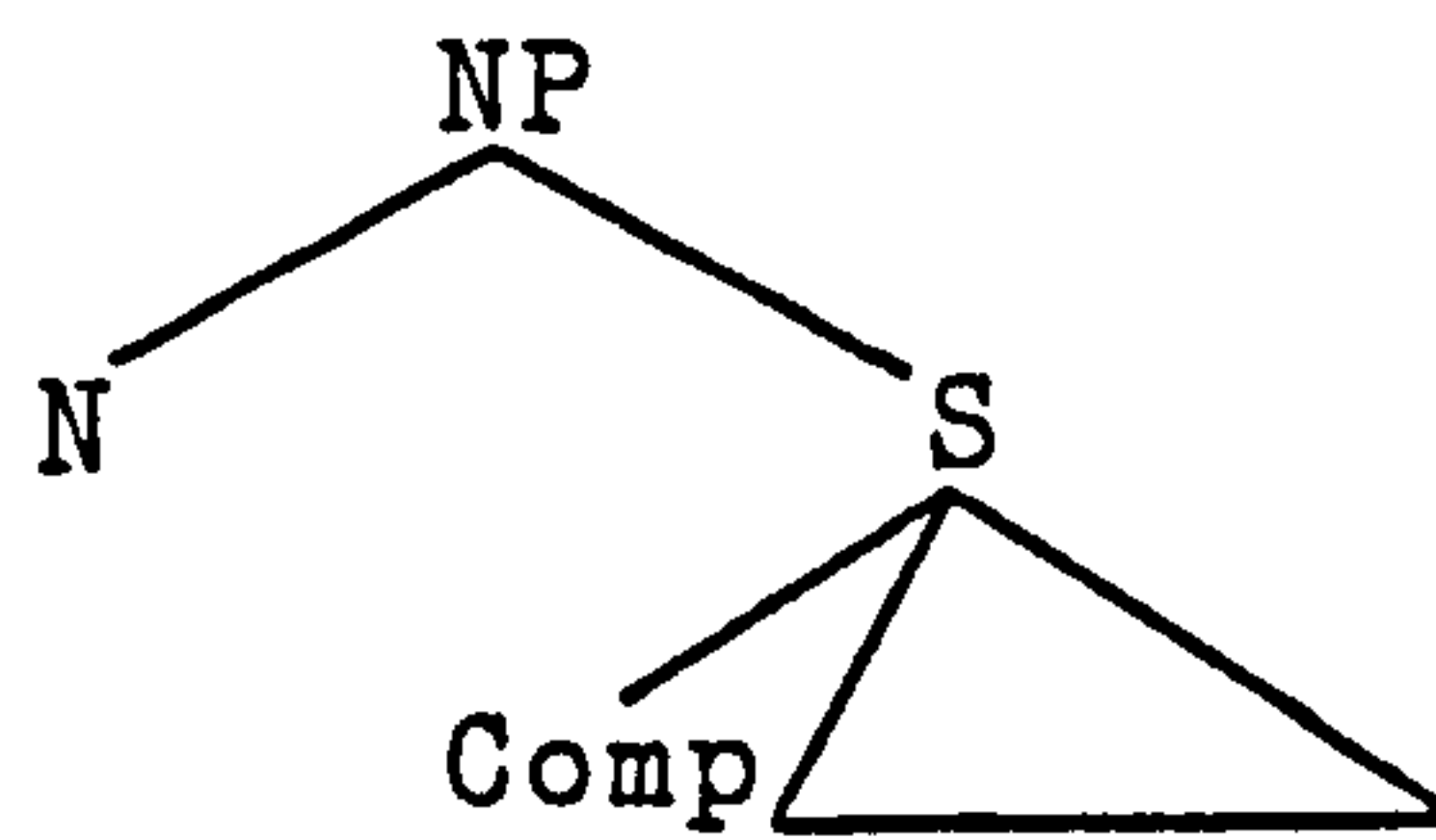
- (13) a. mouTusi bhalobasto boi po^hte
 Moutusi liked book reading
 'Moutusi liked reading a book'



In (13b), the embedded sentence occurs as a verb phrase complement where the noun is identical to the noun of the matrix sentence (Moutusi) and the verb phrase complement is immediately dominated by the verb phrase.

A noun phrase complement is immediately dominated by an NP, which is shown in the following phrase structure diagram:

(14) a.



In (14a), the S is immediately dominated by an NP and is preceded by a complementizer. Complementizer plus S constitute the NP complement sentence. (cf.14b).

(14) b. meeTa Je bhat khachche, ta ami Jantam na
 girl-the that rice eating that I knew not
 'I did not know that the girl is eating rice'

The complementizers are placed in the noun phrase complement sentences by a transformational rule. In the same way the complementizer can be deleted from the complement sentences by lexical deletion, as in (15a, b).

(15) a. ami Jantam Je se asbe
 I knew that he come-will
 'I knew that he will come'

 b. ami Jantam Ø se asbe
 I knew he come-will
 'I knew he will come'

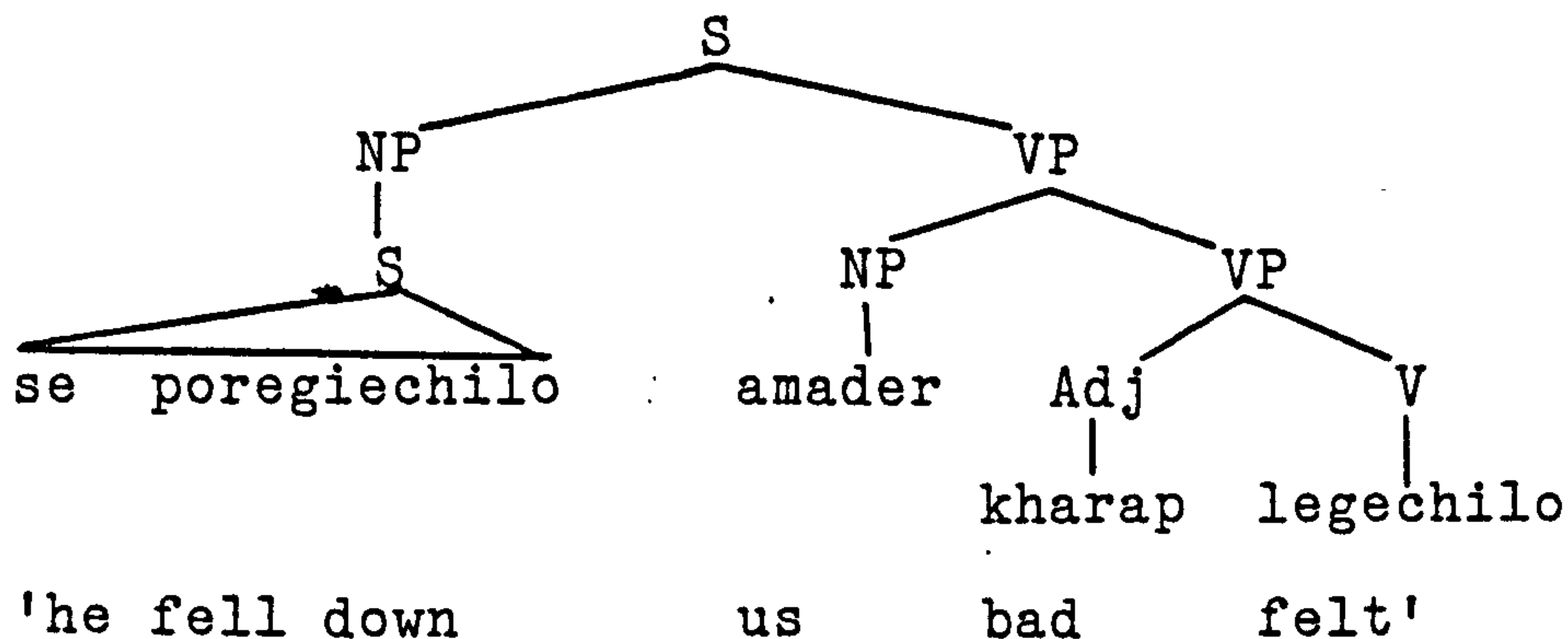
As has been previously mentioned, when there are two independent sentences, either of the sentences can embed the other according to the process of embedding in Bengali. In terms of this process, when a sentence is embedded into another sentence, the embedded sentence is taken as the complement sentence. Je 'that' normally occurs

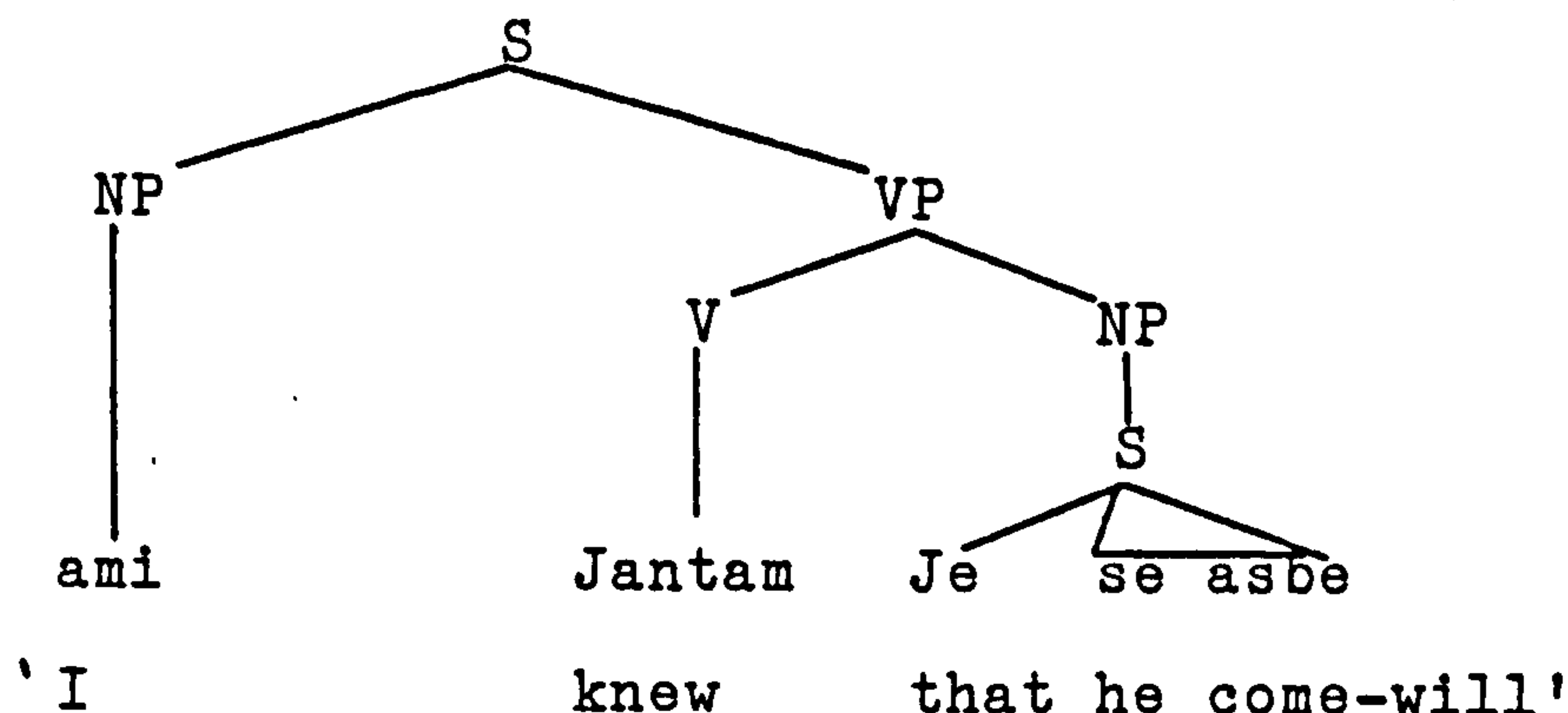
initially in noun phrase complement sentences, whereas Jonne/pokkhe - e/ə/ te 'for-to' and Poss (er) - te 'Poss-ing' complementizers occur inside the noun phrase complement. Note, however, that Je 'that' may also occur inside [ami Jantam Je se esechilo 'I knew that he came'] → the noun phrase complement sentences: [ami Jantam se Je esechilo ta miththe nœ 'I knew it was not untrue that he came']. From this approach, the noun phrase complement may be regarded as a sentence that is embedded in a noun phrase. This will be clear if the deep structure of any noun phrase complement is shown through a tree-diagram. Consider the examples given in (16c, d).

- (16) a. se Je pore giechilo tate amader kharap
 he that fell down that-in us bad
 legechilo
 felt
 'We felt bad that he fell down'
 ['That he fell down caused us to feel bad']

- b. ami Jantam Je se asbe
 I knew that he come-will
 'I knew that he will come'

- c. Tree-diagram for (16a)



d. Tree-diagram for (16b)

In (16a), subject complementation and in (16b), object complementation are shown. Both examples show that the complement sentence is dominated by the VP node. It is clear from the above examples that the easiest way to show the occurrence of Je 'that' complementizer is the following way: Je - S, which indicates that Je 'that' complementizer occurs immediately before the embedded sentence, which in surface structure occurs as the complement sentence.

Rosenbaum (1967: 33 and 71) discusses both subject and object complementation. In the case of object complementation, the verb phrase is expanded into the verb and a noun phrase, which may also be extended. Sentences like the following are examples of object complementation:

(17) a. tara Janto Je tumi asbe na
 they knew that you come-will not
 'They knew that you won't come'

b. mita bhalo korei Janto Je phouJia asbe na
 Mita well doing knew that Fouzia come-will not
 'Mita knew well that Fouzia won't come'

Subject complementation is possible for both transitive and intransitive verbs. When subject complement is applied for transitive verbs, the expansion of an S takes in NP and VP, which indicates that both the noun phrase and the verb phrase are dominated by an S, or the S is enlarged into two main strings, into a noun phrase and a verb phrase. However, there is no basic difference between the complementation of transitive and intransitive verbs. The following examples are given to show complementation in Bengali with transitive and intransitive verbs.

- (18) a. Daktar Je osud diechen, ta ami Jantam na
 doctor that medicine given-has that I know not
 'I did not know that the physician has prescribed
 the medicine'
- b. Daktar Je esechen ta ami Jantam na
 doctor that come-has That I know not
 'I did not know that the physician has come'

Daktar 'doctor' is the subject in (18a) and (18b) and osud 'medicine' occurs as the object in (18a). No object occurs in (18b).

It is also possible to construct verb phrase complementation with transitive and intransitive verbs. The following examples are given to show the verb phrase complementation with transitive and intransitive verbs.

(19) VP Complementation with Transitive Verb

a. ami mouke ei boiTate mɔlaT dite sahaJJo

I Mou-to this book-to cover giving help

korechilam

did

'I helped Mou to cover this book'

b. ami mɛnake boi pⁿɔte bolechilam

I Moina-to book read-to told

'I told Moina to read book'

(20) VP Complementation with Intransitive Verb

a. ami Jantam Je lokTa kãdchilo

I knew that man-the weeping

'I knew that the man was weeping'

b. ami sunechilam Je se aphoto hoeeche

I heard that he wounds got

'I heard that he got wounded'

5.4 Condition on the occurrence of the Complementizers

Bresnan (1979) in her thesis regards complementizers as 'Clause-particles'. According to her statement, the complementizers have semantic content and syntactic function (p.9). As the complement sentences are always regarded as embedded and complementizers are inserted into such types of sentences, no complementizers can appear in an unembedded (non-complex) sentence. If any complementizers occur in any unembedded sentences, this will yield ungrammatical sentences. The examples in (21) show that this is also the case with Bengali.

- (21) a. *se Je cinta korechilo
 he that think did
 'that he thought'
- b. *se Je sapno dekhechilo
 he that dream saw
 'that he dreamt'
- c. *tara Je bhai
 they that brother
 'that they (are) brothers'

All these (21a-c) strings are ungrammatical as they are unembedded. They will be grammatical after embedding into another sentence, as shown in (22).

- (22) a. se Je cinta korechilo, ta sotti
 he that think did that true

'That he thought was true'

['It was true that he thought']

b. se Je sapno dekhechilo, ta sotti

he that dream saw that true

'It was true that he dreamt'

c. tara Je bhai ta cehara dekhlei

they that brother that appearance seeing

boJha Jae

understand goes

'That they are brothers is understood by their

appearance' (lit)

5.5 Relative and Complement Clauses

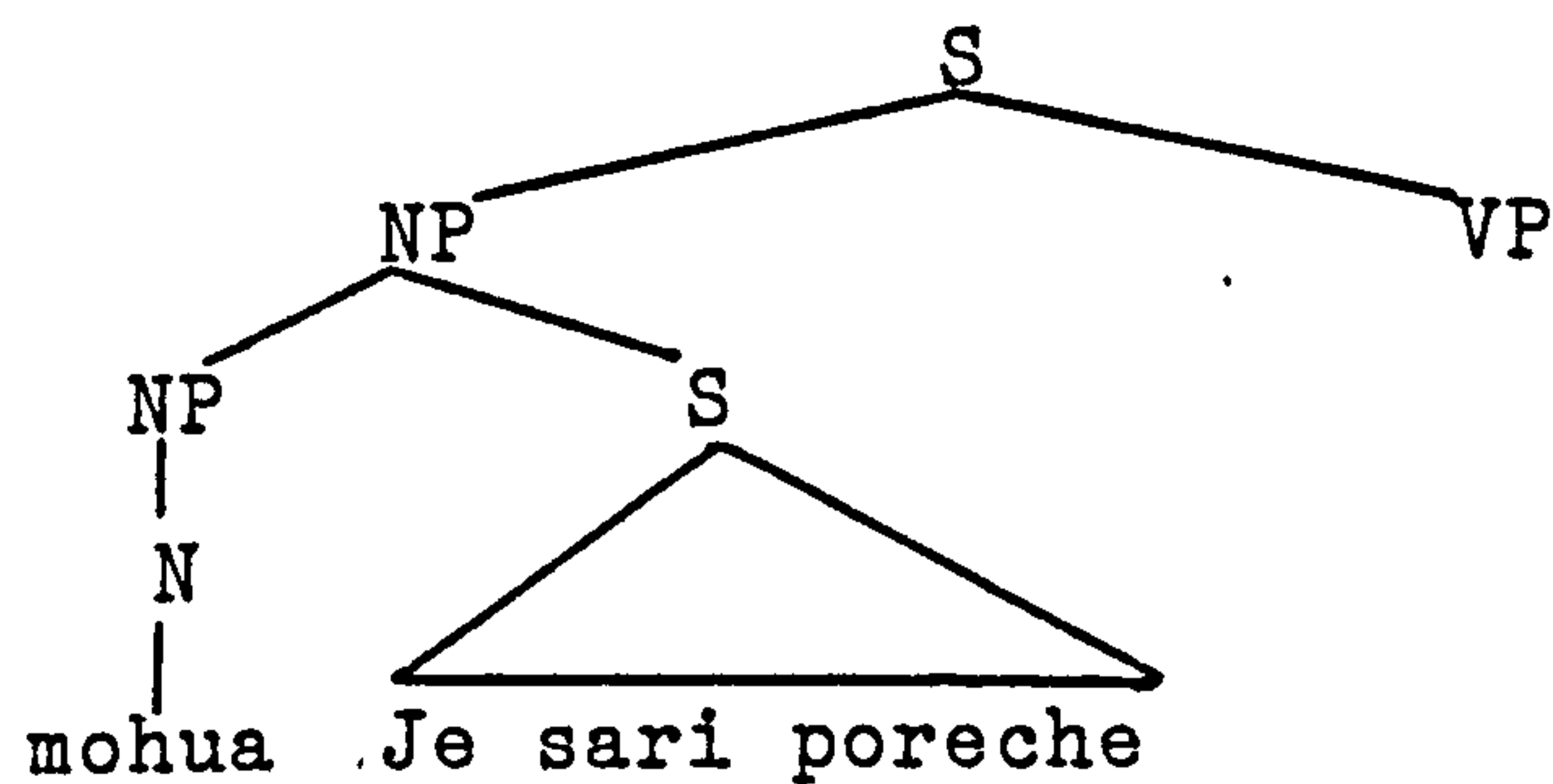
Both relative and complement clauses are embedded in the same way inside another sentence. Though both are embedded, they can be distinguished through their structure and grammatical function in the sentence. The correlatives in complement constructions are similar to relative clauses except that the inanimate constituents occur as correlatives. It is quite clear that the complement clauses can function either as a subject or an object in the sentence. The relative clauses, on the other hand, do not have identical function as they are the modifiers of the noun phrase (Langacker, 1972: 144). The following examples will illustrate the differences between relative and complement clauses.

- (23) a. mohua, Je sari poreche, se skuler chattri
 Mohua who sari wearing she school-of student
 'Mohua, who is wearing a sari, is a school student'
- b. mohua Je songitsilpi, ta sobai Jane
 Mohua that singer that all know
 'All know that Mohua is a singer'
- c. tate kono sɔnde ho nei Je mohua songitsilpi
 that-in any doubt not that Mohua singer
 'That Mohua is a singer is in no doubt'
 ['There is no doubt that Mohua is a singer']

The relative clause is shown in (23a), where the relative clause Je sari poreche 'Who is wearing a sari' modifies the

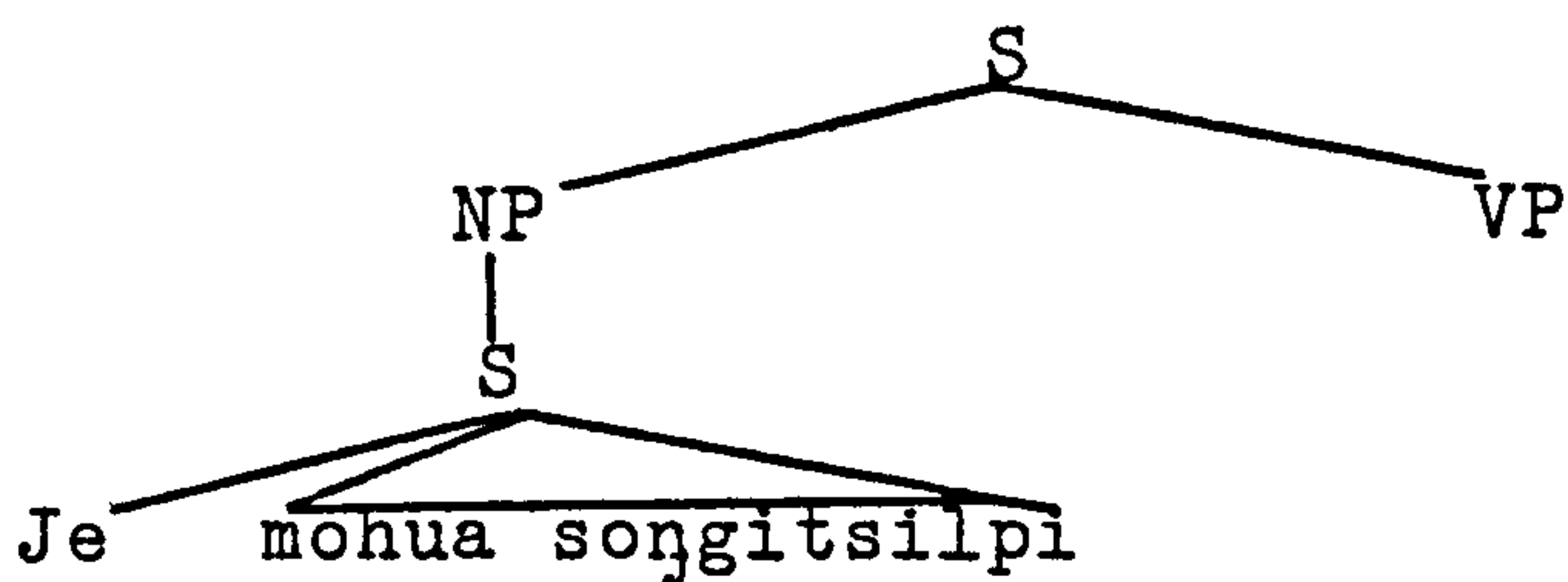
head noun mohua 'Mohua'. The complement sentences in (23b) and 23c) are shown in subject and object position. mohua Je songitsilpi 'that Mohua is a singer' occurs as complement sentence in (23b) and (23c). The difference between the relative and complement clause can be observed in the following tree-diagrams.

(24) a. Relative Clause



'Mohua who is wearing a sari'

b. Complement Clause



'That Mohua is a singer'

The structural differences between relative and complement clauses can also be handled in a different way. It can be said that the two have identical structures. The only difference is that in relative clauses, a comma intonation is perceived after the antecedent which separates the relative pronoun from it. In a deictic relative clause, the relative pronoun and the postcedent occur side by side

and Je 'who' is not separated from the relative clause like a complementizer (e.g. Je-cheleTa eseche 'Who the boy has come') (cf.5.1). In ^{the} case of a complement sentence, no comma intonation is perceived in between the antecedent and Je 'that'. The structure of a complement clause stands something like this: head noun + Je + ... (meeTa Je esechilo 'that the girl came'). The correlatives mark the relative and complement clauses in two different ways: when a human noun occurs as an antecedent in the relative clause, the human correlative occurs in the matrix sentence, and the inanimate correlative occurs in the case of a human noun that occurs before the complement in the complement sentence. In the case of the occurrence of any non-human nouns in a relative clause, the correlative becomes identical like a complement clause, but the relative pronoun becomes quite different. When an inanimate antecedent occurs before the relative clause, it will be separated with a comma intonation like the human antecedents. In the case of a deictic relative clause, the deictic relative pronoun always precedes the relative clause, but in the case of Je 'that' it never occurs as a complementizer before any inanimate noun in sentence-initial position. This may be shown in the following examples.

- (25) a. meeTa, Je boi porche, se amar bandhobi
 girl-the who book reading she my friend
 'The girl, who is reading a book, is my friend'

- b. meeTa Je boi porche ta ami Jani
 girl-the that book reading that I know
 'I know that the girl is reading a book'

In (25a), Je 'who' occurs as a relative pronoun, which is separated from the antecedent with a comma intonation and the human correlative se 'she' occurs against the human relative pronoun. On the other hand, Je 'that' occurs as a complementizer and the correlative becomes different in (25b) from (25a).

- (26) a. boiTā Ja se cae, ta pabe
 book-the what he wants that get-will
 'He will get the book that he wants'
- b. boiTā Je se cae, ta ami Jani
 book-the that he wants that I know
 'I know that he wants the book'

In (26a), the antecedent of the relative clause is inanimate which is separated from the relative clause with a comma, whereas, no such comma exists in (26b) between boiTā 'the book' and Je 'that'. Moreover, Ja 'what' occurs as the relative pronoun in (26a), which has a different lexical identity than the complementizer Je 'that' in (26b). Though both correlatives (26a, b) are identical, the matrix sentences are non-identical.

- (27) a. Je- boiTā tumi cao, ta pabe
 which book-the you want that get-will

'You will get the book that you want'

b. *Je boiTa tumi cao, ta pabe

(27a) shows the construction of a deictic relative clause where Je 'which' precedes the postcedent. However, Je 'that' complementizer does not occur initially in any sentence, and hence the ungrammaticality of (27b). All these examples show that relative pronoun Je 'who' and complementizer Je 'that' can be handled with the help of the occurrence of the relative pronoun and the complementizer in identical initial clauses and the structure of the correlatives in matrix sentences.

5.6 Complementizer Insertion Rule

The simplest way to show complementizer insertion into a complex sentence is the following:

(28) Complementizer Placement

X + S + Y

NP NP

1 Je + 2 3

In the same way the infinitive and the gerundive complementizers can be placed before any S in a sentence. Rule (28) will allow the insertion of any complementizer before any noun phrase complement sentence. In this case, the complement sentence will show the structure of the noun phrase complement as NP → Comp S.

The complementizer can be placed in two ways in a sentence. Either it can be used independently in a sentence or if it occurs with a relative clause, the two embedded clauses must occur one for the relativized NP and one for the complement clause NP. When a relative clause occurs in a sentence, the complementizer can be inserted either in the matrix sentence or in a separate clause other than the relative clause and the matrix sentence (cf.31). In the same way, when a complementizer occurs in a complement clause noun phrase, structural modification of the sentence is necessary to introduce a relative clause side by side with the complement clause. All these possibilities are shown in the following examples.

(29) a. aJ sɔkale bhɔddrolɔk, Jini esechen, tini
 today morning-in-the gentleman who come-has he
 amar bondhu
 my friend

'The gentleman who has come this morning is my
 friend'

b. bhɔddrolɔk, Jini boi porchen, tini amader
 gentleman who book reading he our
 protibesi
 neighbour

'The gentleman who is reading a book is our
 neighbour'

(30) a. aJ sɔkale bhɔddrolɔk, Jini esechilen,
 today morning-in gentleman who came
 tini Je amader protisbesi ta ami Jantam na
 he that our neighbour that I knew not
 'I did not know that the gentleman who came this
 morning is our neighbour'

b. bhɔddromohila, Jini boi porchen, tini amader
 woman who book reading she our
 protibesi ta Je ami Jantam ta Thik
 neighbour that that I knew that true
 'It was true that I knew that the woman who was
 reading a book is our neighbour'

(31) a. bhɔddrolɔk Je amader protibesi, ta ami Jantam
 gentleman that our neighbour that I knew

na

not

'I did not know that the gentleman was our neighbour'

- b. cheleTa Je skuler chattro, ta ami Jani
 boy-the that school-of student that I know
 'I know that the boy is a student of the school'

The way the independent sentences are embedded is shown in (32).

- (32) a. cheleTa doure cole gæ lo
 boy-the running went away
 'The boy went away running'

- b. cheleTa skuler chattro
 boy-the school-of student
 'The boy is a student of the school'

- c. mou Jane
 Mou knows
 'Mou knows'

- d. cheleTa, Je doure cole gæ lo, se Je skuler
 boy-the who running went away he that school-of
chattro, ta mou Jane
 student that Mou knows
 'Mou knows that the boy who went away running is
 a student of the school'

cheleTa 'the boy' is the antecedent of sentence (32d).

d. ami Jantam Je lokTa, [Je bose ache], se
 I knew that man-the who sitting is he
 cole Jabe
 away go-will

'I knew that the man who is sitting will go away'

(Complementizer + Relative Clause)

(33c) is shown as a relative clause without inserting any complementizer, whereas, the complementizer is inserted in (33d) before the antecedent and the embedded sentence.

5.7 Reduced Complementation

Akmajian and Heny (1975) mention reduced complementation. The complement that does not have any overt subject is regarded as the Reduced Complement. The following examples are given to show the structure of the reduced complements.

- (34) a. kækJon cae skule porte
 a few want school-in studying
 'A few want to study in the school'
- b. ami cai pɔre sinemae Jete
 I want later cinema-in go-to
 'I want to go for the movie later'

The phrases that are underlined in (34) occur without any overt subjects which entitle them to become reduced complements. It is predicted that there is a subject in the phrase which is omitted and qualify them as reduced complements. The paraphrase of the intermediate structures which are shown in the above examples will clarify this point:

- (34) c. kækJon cae kækJon skule porte
 a few want a few school-in studying
- d. ami cai ami pɔre sinemae Jete
 I want I later cinema-in go-to

In (34c, d), the items that occur as subjects in the reduced complement sentences have coreferential use like

the relative clause structures in Bengali. The covert subject of the reduced complement sentence has the same function like the subject that occurs in the higher sentence (e.g. matrix sentence in relative clause), i.e. the same subject occurs both in main clause and in embedded clause. It can be said that the subject is missing in the reduced complement sentence which is traceable through the application of transformational rule.

CHAPTER SIX

Deletion and Movement Rules in Bengali Relative Clauses

6.0 Introductory

In the following section, a few transformational rules which involve deletion and re-ordering of clause or sentence constituents are explained within the framework of relativization.

When a relative clause is constituted in Bengali, some constituents can be deleted from the surface sentence structure. In ^{the} case of deleting any constituents in the relative clause, all other constituents except that of relative pronoun, are considered in the present discussion. It has already been mentioned that the relative pronoun cannot be deleted from the relative construction in Bengali (cf.3.5). Moreover, the deletion of coreferential pronouns is not considered here as this too is discussed elsewhere (cf.2.1.4). In this chapter, the deletion of identical constituents verbs, objects nouns and adverbs is shown under the heading of Gapping.

Besides the deletion of identical constituents in relative clauses, a few movement rules are included in the discussion to show the movements of different major constituents in a relative construction. The term 'movement' (re-ordering or permutation) is applied here to those cases where a transformational rule is applicable to show

the movement of constituents from one part to another in a relative construction. When a movement rule is applied, it moves one constituent or phrase at a time from one part to another part in a sentence. The movement of constituents can be either forward or backward. The movement rule does not involve any change in sentence-meaning, rather it shows the change of emphasis on certain words or phrases, or may show the condition of inserting different categories of words in certain places in a sentence.

Four different types of movement rule included in the present discussion are Scrambling, Topicalization, Extraposition and Focus. All these rules involve the moving of words or phrases in a relative construction. Scrambling shows the movement of different words which occur in relative clauses. Various possibilities of word movements are described in Scrambling. The topic of the sentence, which occurs in the relative clause, is included in the movement rule with its features when it moves the constituents from their original place of occurrence. The initial constituent of a relative clause moves to the end of the sentence or clause in extraposition and shows different structures of the relative clauses after extraposing the constituent to the end of the sentence. In focusing, different constituents which constitute a relative clause move to other positions after focusing on the major constituents which change the pattern of the clause or the sentence which is given emphasis. In describing different

movement rules, both simple and complex sentences, the latter of which incorporate a relative clause, are introduced to exemplify them.

Ross (1967) was the first to consider Gapping within the framework of generative grammar, further investigation being reported in Ross (1970), Jackendoff (1971), Koutsoudas (1971), Maling (1972), Hankamer (1973, 1979), Stillings (1975), Kuno (1976) and Neijt-Kappen (1979). Though in earlier formulation of Gapping rules, the deletion of identical verbs was emphasised, later Jackendoff (1971) has included deletion of other items than verbs. Hence, the deletion of any grammatical item is allowed in Gapping; with more emphasis being given to verbs.

6.1 Gapping

6.1.1 Gapping in Bengali

Gapping is applied here in the sense of the deletion of the repeated verb, object noun, or adverb in the clause which is conjoined. It should be emphasised that only identical constituents can be gapped. Deletion of identical verb, adverb or object is shown in the relative clause in the present study. It should be mentioned here that when Gapping is applied in the relative clause, the structure of the latter is taken as the extended structure of a relative clause in Bengali. The relative clause may be taken as a single clause, which stands either as a subordinate clause or an embedded clause of the matrix sentence. For Gapping to be applied to a relative clause, there must be two conjoined relative clauses and a matrix sentence. The repeated verb, adverb or object is deleted either from the first or the second relative clause. The matrix sentence has been disregarded in Gapping as no identical elements can occur in the relative clause and in the matrix sentence (apart, of course, from the coreferential NPs). From this point of view, when Gapping is applied to Bengali, three simple sentences are joined together, two of which constitute two relative clauses and the third sentence stands as the matrix sentence. The deletion of repeated verbs, adverbs or objects is shown in the two conjoined clauses which

constitute two relative clauses side by side.

As mentioned above, it is necessary to conjoin two sentences to show gapping or deletion of identical verbs, object nouns and adverbs. This kind of coordinated sentence is valid only for gapping identical elements without formulating a relative clause in the coordinated structure. When a relative clause is introduced in the coordinated sentence, it is necessary to constitute three or more sentences to show the correct structure of the relative clause. This is essential, especially for Bengali relative clauses, due to its relative-correlative structure. This statement is also valid for English relative clauses in the coordinate structure though it does not have any correlative construction. This may be shown in the following examples.

- (1) a. cheleTa bhat khachche
 boy-the rice eating
 'The boy is eating rice'
- b. cheleTa manso khachche
 boy-the meat eating
 'The boy is eating meat'
- c. cheleTa bhat o manso khachche
 boy-the rice and meat eating
 'The boy is eating rice and meat'
- (2) a. The boy is eating rice
- b. The boy is eating meat.

c. The boy is eating rice and Ø meat.

- (3) a. cheleTa, Je bhat o manso khachche, se æ kJon
 boy-the who rice and meat eating he a
 namkora khæ loar
 famous player
 'The boy, who is eating rice and meat, is a famous
 player'
- b. The boy, who is eating rice and meat, is a famous
 player

Two simple sentences are conjoined together in (1) to gap the identical verb in Bengali. (2) illustrates the structure of English coordinated sentences and the deletion of the identical verb. The coordinated structures for gapping identical elements clearly establish the fact that it is necessary to conjoin two sentences for deleting identical elements without introducing any relative clauses and a combination of three sentences for deleting identical elements from the relative clause construction.

A second point can also be mentioned here is that in the case of gapping identical verbs, object nouns and adverbs from a coordinated structure constituting a relative clause, it may contain either one or two antecedents. When one antecedent occurs in the coordinated structure, both antecedents are identical and it permits only one relative pronoun. In the case of the occurrence of two antecedents, it permits two relative pronouns, one in the first and the

other in the second sentence, and the antecedents can be taken as compound antecedents comprising two (or more) non-identical NPs. When one antecedent occurs in the first two sentences of a coordinated structure, the coreferential pronoun remains singular and the coreferential pronoun becomes plural in case of two antecedents. These are illustrated in the following examples.

- (4) a. mœna Je bhat ar maṇso khachche, se amar
 Moina who rice and meat eating she my
 premika
 girl-friend
 'Moina who rice and meat is eating is my girl-
 friend'
 ['Moina, who is eating rice and meat, is my girl
 friend']
- b. mœna, Je taratari bhat ar maṇso rāḍche, se
 Moina who quickly rice and meat cooking she
 amar premika
 my girl-friend
 'Moina, who quickly rice and meat is cooking, is
 my girl-friend'
 ['Moina, who is cooking rice and meat quickly, is
 my girl-friend']
- c. mœna, Je boi dekhche ar gochache, se amar
 Moina who book looking and arranging she my
 premika
 girl-friend

'Moina, who is looking at books and arranging them, is my girl-friend'

- d. mɔena, Je bhat khachche ar mou, Je ruTi, tara
Moina who rice eating and Mou who bread they
duTo sundor sari kineche
two beautiful sari bought-have
'Moina, who is eating rice and Mou, who is eating
bread, have bought two beautiful saris'

- e. mɔena, Je taratari bhat ar mou, Je taratari
Moina who quickly rice and Mou who quickly
tarkar rãdche, tara hom ikonɔmiks koleJer
vegetable cooking they Home Economics College-of
chattri
student
'Moina, who is cooking rice quickly and Mou, who
(is cooking) vegetable (quickly) are students of
Home Economics College'

- f. mɔena, Je boi porche ar mou, Je gochache,
Moina who book reading and Mou who arranging
tara bissobiddalɔer chattri
they University-of student
'Moina, who is reading a book and Mou, who is
arranging (books) are students of the University'

In the above examples, the gapping of identical verbs, adverbs and noun objects is shown with identical (4a-c) and non-identical (4d-f) antecedents of the relative clauses.

mɔena 'Moina' occurs as the identical antecedent in (4a-c) and the coreferential pronoun se 'she' show singularity in its structure. The occurrence of non-identical antecedents is shown in (4d-f) where mɔena 'Moina' and mou 'Mou' occur as non-identical antecedents of the respective relative clauses. The coreferential pronoun tara 'they' shows plurality in its structure against the two non-identical antecedents.

Before elaborating any rules, we can show the way Gapping works in Bengali. Compare the following examples where deletion of identical verbs is shown.

- (5) a. bhɔddrolɔk, Jini doi kheechilen ar bhat
 gentleman who curd ate and rice
 kheechilen tini mouer mama
 ate he Mou's uncle
 'The gentleman, who ate curd and (ate) rice, is
 Mou's uncle'

- á. bhɔddrolɔk, Jini doi [kheechilen]ar bhat
 gentleman who curd ↓
 Ø ate and rice
 kheechilen, tini mouer mama
 ate he Mou's uncle
 'The gentleman who curd and ate rice, is Mou's
 uncle'

['The gentleman, who ate curd and rice, is Mou's
 uncle']

- (6) a. mou, Je doi kheechilo ar ruTi kheechilo, se
 Mou who curd ate and bread ate she
 amar bondhu
 my friend
 'Mou, who ate curd and (ate) bread, is my friend'
- á. mou, Je doi kheechilo ar ruTi{kheechilo} se
 Mou who curd ate and bread ↓ Ø ate she
 amar bondhu
 my friend
 'Mou, who ate curd and bread, is my friend'

Two possibilities are shown for Bengali when the identical verbs are deleted. There are two ways: either the first or the second identical verb may be dropped. When the first identical verb is dropped and the second verb is retained, it is more readily comprehensible than the case when the first verb is retained and the second verb is dropped. Though the sequence of constituents in (6) is not uncommon, the examples which are given in (5) are actually more common. It is quite clear from the above examples (5 & 6), that Gapping can be applied by deleting either the first or the second identical verb in a conjoined structure.

Forward and Backward Gapping depends on certain features of the clauses in a sentence. Backward Gapping is more common than Forward Gapping in Bengali as the verb is deleted from the first sentence and it is retained in the

second sentence. Backward Gapping retains the original word order in Bengali, i.e. SOV pattern of the sentence. Compare the following sentences where both patterns are tested.

(7) Forward Gapping: SOV - SO

- a. mœena, Je bhat khachche ar doi khachche, se
Moina who rice eating and curd eating she
amar bandhobi
my friend.
'Moina, who is eating rice and (is eating) curd,
is my friend'
- b. mœena, Je bhat khachche ar doi Ø, se amar
bandhobi
'Moina, who is eating rice and curd, is my friend'

(8) Backward Gapping: SO - SOV

- a. mœena, Je bhat khachche ar doi khachche, se
Moina who rice eating and curd eating she
amar bandhobi
my friend
'Moina, who is eating rice and (is eating) curd,
is my friend'
- b. mœena, Je bhat Ø ar doi khachche, se amar
bandhobi
'Moina, who rice and is eating curd, is my friend'
['Moina, who is eating rice and curd, is my friend']

In the above examples (7 & 8), the second identical verb is deleted in Forward Gapping, whereas it is retained in Backward Gapping and the first identical verb is dropped. mɔena 'Moina' is the antecedent in both the sentences (7 & 8).

Maling (1972: 105) proposes that both Backward and Forward Gapping should be conflated as a single Gapping rule. (7) and (8) show that except for the verb being deleted either from the first or second sentences, the other constituents of the sentences remain intact. However, this statement is valid only for Gapping without Scrambling (Scrambling will be discussed in the later part of this chapter), as Scrambling shifts one constituent from its former position. We can disregard her proposal on the ground that there is one hindrance in the way of accepting Forward and Backward Gapping as a single rule. As shown in (7) and (8), Forward Gapping gives the structure to Bengali of SOV to SO, whereas, Backward Gapping gives the opposite structure, which in turn becomes SO to SOV. SO - SOV and SOV - SO are not identical and we cannot accept Maling's proposal regarding one single gapping rule.

Bengali being a SOV language, it is assumed that when the verb is deleted from the first clause and is retained in the second clause, it helps to maintain the structural form of the sentence pattern of the language. However, when the identical verb is deleted from the second clause it does not create any inappropriateness. If any

hearer claims any inappropriateness due to the absence of the verb from the second clause, some lexical items can be inserted easily in the second clause before the deleted verb, so that it becomes much easier for a hearer to understand the meaning of the sentence. This proposal is made on the intuition of being a native speaker of Bengali. This may be illustrated in the following examples.

- (9) a. lokTa, Je kɔla kheechilo ar bhat kheechilo,
 man-the who banana ate and rice ate
 se amader protibesi
 he our neighbour
 'The man, who ate banana and (ate) rice, is our
 neighbour'
- b. lokTa, Je kɔla kheechilo ar bhat Ø, se
 man-the who banana ate and rice he
 amader protibesi
 our neighbour
 'The man, who ate banana and rice, is our neigh-
 bour'
- c. lokTa, Je kɔla kheechilo ar tar songe bhat,
 man-the who banana ate and its with rice
 se amader protibesi
 he our neighbour
 'The man, who ate banana and rice with it, is our
 neighbour'

- d. lokTa, Je kɔla kheechilo ar bhato, se
 man-the who banana ate and rice also he
 amader protibesi
 our neighbour
 'The man, who ate banana and also rice, is our
 neighbour'

Though the above sentences are grammatical, they cannot be taken as involving the simple application of a gapping rule, as certain items are introduced in place of the second identical verb (which is deleted) and are the violation of a gapping process as normally understood. In (9c), the phrase tar songe 'with it' is added to the second sentence where the verb is gapped. This phrase fills the place of the deleted verb and gives some kind of autonomy to the second sentence in the absence of a verb. Usually, when the dual function of verbs is shown in a conjoined sentence, phrases like tar songe 'with it' can occur in the second sentence to give the meaning like 'He ate X and also Y'. Even though the identical verb remains in the conjoined sentence, phrases like this may also occur in the sentence: se bhat kheechilo ar tar songe manso kheechilo 'He ate rice with meat'. However, example (9d) did not violate the gapping rule like (9c) since the insertion of 'also' or its equivalent is allowed in Gapping (see Jackendoff 1971: 26). Examples like (9d) will be illustrated later in this discussion. It seems clear from the examples that though any of the identical verbs can be reduced in Bengali, the

reduction of the first verb (in the first or higher sentence) makes better comprehensibility for the speakers of the language than the reduction of the second identical verb (in the second or lower sentence). This assumption is made from my own intuition as a native speaker. It is also to be mentioned that the (5á) type is commoner than (6á) type sentences. After gapping the verb from the first sentence, the structure of the conjoined sentence becomes SO - SOV (5á), which is closer to the usual Bengali sentence pattern rather than SOV - SO (6á). This can also be supported from the existing difference in register between spoken versus written, and formal versus informal speech patterns in Bengali. If the verb is deleted from the first sentence and is retained in the second sentence, it shows the spoken pattern of the language. As there exists a difference between spoken and written patterns, the verb can be deleted either from the first or the second sentence only in the written pattern of the language. The informal pattern of the language prefers the deletion of verb from the first sentence and retaining it in the second sentence, which may be the opposite in the formal pattern of the language.

6.1.2 Different Coordinate Conjunctions in Bengali

The examples which are given previously are of conjoined sentences, and ar 'and' occurs as a conjunction

between
 the two sentences. Gapping is applied when two clauses in
 a sentence are connected by corresponding conjunctions.
 Three coordinating conjunctions can be applied to Bengali,
 which are o, ar, ebon 'and', othoba, ba, kimba 'or' and nge
 'nor'. The following sentences are conjoined with three
 coordinating conjunctions and a relative clause is
 introduced in the sentences.

- (10) a. mœna, Je harmonium baJachche ar mou, Je setar
 Moina who harmonium playing and Mou who sitar
 baJachche, tara ãttio
 playing they relative
 'Moina, who is playing a harmonium and Mou, who
 is playing a sitar, are relatives'
- á. mœna, Je harmonium Ø ar mou, Je setar baJachche,
 tara ãttio
 'Moina, who harmonium and Mou, who is playing a
 sitar, are relatives'
 ['Moina who is playing a harmonium and Mou, who a
 sitar are relatives']
- b. mou, Je ghuri orachche ba mœna, Je belun
 Mou that kite flying or Moina that balloon
 orachche, ta ekTu age dokan theke kena
 flying that moment ago shop from bought
 hoeeche
 has
 'The kite that Mou is flying or the balloon that
 Moina (is flying), have been bought from the shop
 a while ago'

৬. mou Je ghuri Ø ba mœna Je belun orachche, ta
ekTu age dokan theke kena hoeche
'The kite that Mou or the balloon that Moina is
flying, have been bought from the shop a while
ago'

['The kite that Mou is flying or the balloon Moina,
have been bought from the shop a while ago']

- c. hœ mou, Je bāsi baJabe, nœ mœna, Je setar
either Mou who flute play-will or Moina who sitar
baJabe, tara songit koleJer chattri
play-will they music college-of student
'Either Mou who will play the flute or Moina who
will play the sitar, is a student of the Music
College'

৮. hœ mou, Je bāsi Ø, nœ mœna, Je setar baJabe,
tara songit koleJer chattri
'Either Mou who flute or Moina who will play the
sitar, is a student of the Music College'
['Either Mou, who will play the flute or Moina,
who the sitar, is a student of the Music College']

Jackendoff (1971: 22) also proposes but as a
coordinate conjunction. Though but does not work neatly in
English, it works perfectly as a conjunction in Bengali
coordinate sentences. This is shown in the following
examples.

- (11) a. amader bandhobi mœena, Je gɔtokal sinema.
 our friend Moina who yesterday cinema
 dekhechilo kintu tar choTo bon mou, Je
 went but her younger sister Mou who
 gɔtokal thieTar dekhechilo, tara æ ki
 yesterday theatre went they same
 bissobiddalœer chattri
 University-of student
 'Our friend Moina, who went to the cinema
 yesterday but her younger sister Mou, who went to
 the theatre, are students of the same University'
 ['Our friend Moina, who went to the cinema
 yesterday while her younger sister Mou went to
 the theatre, both of them are students of the
 same University']
- b. amader bondhobi mœena, Je gɔtokal sinema Ø kintu
 tar choTo bon mou, Je gɔtokal thieTer dekhechilo,
 tara æ ki bissobiddalœer chattri
 'Our friend Moina who cinema while her younger
 sister Mou who went to the theatre are students
 of the same University'
 ['Our friend Moina, who went to the cinema
 yesterday while her younger sister Mou went to
 the theatre are students of the same University']

There is one interesting feature in Bengali when
na 'not' is introduced as a conjunction in lieu of ar 'and'
ba 'or', nœe 'nor' or kintu 'but'. na 'not' is always used

as a negative item in a sentence or independently as a word. Three points to be made explicit regarding the introduction of na 'not' in a conjoined structure are that na gives the meaning of a kind of doubt, that deleting the second identical verb is much easier than deleting the first, and that the speakers understand the meaning of the sentence more easily (cf.4.1). The following examples are given after introducing na in the relative construction.

- (12) a. bhəddrolək, Jini boi porchen na pottrika
gentleman who book reading not paper
porchen, tini amader oddhapok
reading he our teacher
'The gentleman, who is neither reading a book nor
reading a paper, is our teacher'
['The gentleman, who is reading neither a book nor
the paper is our teacher']
- á. bhəddrolək, Jini boi Ø na pottrika porchen, tini
amader oddhapok
- b. meeTa, Je aenae niJer mukh dekhche na onno
girl-the who mirror-in own face looking nor some
kauke dekhche, se amar bandhobi
body else looking she my friend
'The girl, who is looking neither at her own face
nor is looking at somebody else in the mirror, is
my friend'
['The girl, who is looking neither at her own face

nor at somebody else in the mirror, is my friend']

b. meeTa, Je aenae niJer mukh Ø na onnokauke
dekhche, se amar bandhobi

b̃. meeTa, Je aenae niJer mukh dekhche na onnokauke
Ø, se amar bandhobi

Ross (1970: 250) has shown that there is a problem with deleting one of the identical verbs if negation is introduced in a conjoined structure. This kind of problem does not arise in Bengali, though if there is negation only backward gapping is possible. Forward gapping is not absolutely impossible, but it gives unsatisfactory results as it does not show clearly whether all the nouns are in the scope of the negative elements. Compare the following examples.

(13) a. mœena, Je bhat khæ ni ar mou, Je Dim khæ ni,
Moina who rice eat not and Mou who egg eat not
tara amar bondhu
they my friend

'Moina, who did not eat rice and Mou, who did not eat an egg, are my friends'

b. mœena, Je boi porche na ar kh̃borer kagoc
Moina who book reading not and news paper
porche na, se amar bandhobi
reading not she my friend

'Moina, who is reading neither a book nor (is reading) a newspaper, is my friend'

(14) Backward Gapping

- a. mɔena, Je bhat Ø ar mou, Je Dim khæ ni, tara
 Moina who rice and Mou who egg eat not they
 amar bandhobi
 my friend
 'Moina, who (did not eat) rice and Mou, who did
 not eat an egg, are my friends'
- b. mɔena, Je boi Ø ar khɔborer kagoc porche na,
 Moina who book and news paper reading not
 se amar bandhobi
 she my friend
 'Moina, who book and is not reading a newspaper is
 my friend'
 ['Moina, who is reading neither a book nor a news-
 paper, is my friend']

(15) Forward Gapping

- a. mɔena, Je bhat khæ ni ar mou, Je Dim Ø,
 Moina who rice eat not and Mou who egg
 tara amar bandhobi
 they my friend
 'Moina, who did not eat rice and Mou, who an egg,
 are my friends'
- b. mɔena, Je boi porche na ar khɔborer kagoc Ø,
 Moina who book reading not and news paper
 se amar bandhobi
 she my friend

'Moina, who is not reading neither a book nor
a newspaper, is my friend'

Though (15) may not be acceptable to all speakers, they are not totally unacceptable either. (15) yields better results if ar 'and' is replaced by ba 'or' as shown in (16). The difference between ar 'and' and ba 'or' is that, while both are indeclinables, ar 'and' can also occur as an adverb. This indicates that independent indeclinables have a greater freedom of occurrence than the adverbial indeclinables.

- (16) mœena, Je boi porche na ba khoborer kagoc, se
Moina who book reading not or news paper she
amar bandhobi
my friend
'Moina, who is reading neither a book nor a newspaper,
is my friend'

Besides the preceding examples, there is another interesting way of gapping in Bengali. Consider the following examples.

- (17) a. meeTa, Je sokale ruTi khæ, makhon khæ
girl-the who morning-in-the bread eats butter eats
ar Dim khæ, se mouer bandhobi
and egg eats she Mou-of friend
'The girl, who eats bread, (eats) butter, and
(eats) egg in the morning, is a friend of Mou'

b. meeTa, Je sɔkale ruTi Ø, makhon Ø ar
 girl-the who morning-in-the bread butter and
 Dim khae, se mouer bandhobi
 egg eats she Mou-of friend
 'The girl who eats bread, butter and egg in the
 morning is a friend of Mou'

c. meeTa, Je sɔkale ruTi Ø, makhon Ø
 girl-the who morning-in-the bread butter
əthoba Dim khae, se mouer bandhobi
 or egg eats she Mou-of friend
 'The girl, who eats bread, butter or egg in the
 morning, is a friend of Mou'

(18) a. meeTa, Je songe boi nebe ar Tiphin
 girl-the who with book take-will and tiffin
 nebe, se skule Jabe
 take-will she school-to go-will
 'The girl, who will take books and lunch with her
 will go to school'

b. meeTa, Je songe boi Ø ar Tiphin nebe, se skule
 Jabe

(19) a. meeTa, Je kolom kineche ar pensil kineche
 girl-the who pen bought-has and pencil bought-
 se mouer bandhobi
 has she Mou-of friend
 'The girl, who has bought a pen and a pencil, is
 a friend of Mou'

- b. meeTa, Je kɔlom Ø o pensil kineche, se
 girl-the who pen and pencil bought-has she
 mouer bandhobi

Mou-of friend

'The girl, who has bought a pen and a pencil, is
 a friend of Mou'

- c. meeTa, Je kɔlom pensil dui kineche, se
 girl-the who pen pencil both bought-has she
 mouer bandhobi

Mou-of friend

'The girl, who has bought both pen and pencil, is
 a friend of Mou'

- d. meeTa, Je kɔlom ar pensil kineche, se
 girl-the who pen and pencil bought-has she
 mouer bandhobi

Mou-of friend

'The girl, who has bought a pen and a pencil, is
 a friend of Mou'

In (17-19), different gapping rules and conjoining patterns of sentences are shown. It is quite clear from these examples that three or more identical verbs may occur in a sentence (17a), or disjunction could be made with a negative element in the last verb (if three identical verbs occur in a conjoined sentence). The various conjunctions are shown in relative clause formation and gapping interact in various ways (cf. 20-22).

- (20) a. mou baJar theke dudh kinechilo ar mach kinechilo
 Mou market from milk bought and fish bought
 'Mou bought milk and (bought) fish from the
 market'
- b. mou baJar theke dudh Ø ar mach kinechilo
 'Mou bought milk and fish from the market'
- c. mou, Je baJar theke dudh Ø ar mach kinechilo
 Mou who market from milk and fish bought
se rate bondhuder khaieche
 she night-at friends-of fed-has
 'Mou, who bought milk and fish from the market,
 has fed her friends at night'
- (21) a. mœena phulkopi rãdchilo ar bãdhakopi rãdchilo
 Moina cauliflower cooking and cabbage cooking
 'Moina was cooking cauliflower and (was cooking)
 cabbage'
- b. mœena phulkopi Ø ar bãdhakopi rãdchilo
 'Moina was cooking cauliflower and cabbage'
- c. mœena, Je phulkopi Ø ar bãdhakopi rãdchilo, se
 Moina who cauliflower and cabbage cooking she
mouer bandhobi
 Mou-of friend
 'Moina, who was cooking cauliflower and cabbage,
 is a friend of Mou'

- (22) a. saon tar bandhobir gale cumu kheechilo, ar
 Saon his girl-friend's cheek-on kissed and
 ThõTe cumu kheechilo
 lip-on kissed
 'Saon kissed his girl-friend's cheek and kissed
 (her) lips'
- b. saon tar bandhobir gale Ø ar ThõTe cumu
 kheechilo
 'Saon kissed his girl-friend's cheek and lips'
- c. santosisTo manus saon, Je tar bandhobir ÷
 calm-quiet man Saon who his girl-friend's
 gale ar ThõTe cumu kheechilo, se amar bondhu
 cheek-on and lips-on kissed he my friend
 'The calm and quiet man Saon, who kissed his girl-
 friend's cheek and lips, is a friend of mine'

Je (both as an animate and inanimate = relative pronoun and complementizer) insertion is shown in the above examples after exploring the ways the relative clauses are formed after gapping. Another possibility is that the conjoined constituents are generated that way by the phrase structure rules. Or, conjoined relative clauses get reduced by gapping. There are two possibilities of adding extra clauses in (b) sentences, either they may be included initially (18c) or finally (16c, 17c). Secondly, Je may be inserted before (16c) or after (18c) the antecedents. In all the examples (16-18) gapping is shown without any

relative clauses in (b) and with relative clauses in (c) sentences.

6.1.3 Movement of Constituents after Gapping

Bengali shows variable patterns of sentences when a movement rule is applied after Gapping. The possible ways of formulating sentences after gapping verbs and moving the constituents are shown in the following examples.

(23) a. SO - SOV:

mœna, Je bhat Ø ar mou, Je maṅso khachche,
 Moina who rice and Mou who meat eating
 tara bissobiddalœer chattri
 they University-of student
 'Moina, who is eating rice and Mou, who meat, are
 students of the University'

b. SOV - SO:

mœna, Je bhat khachche, ar mou, Je maṅso Ø,
 Moina who rice eating and Mou who meat
 tara bissobiddalœer chattri
 they University-of student
 'Moina, who is eating rice and Mou, who meat, are
 students of the University'

c. SOV - OS:

mœna, Je bhat khachche, ar maṅso Ø mou, Je,
 Moina who rice eating and meat Mou who

tara bissobiddalɔer chattri

they University-of student

'Moina, who is eating rice and Mou, who meat, are
students of the University'

d. SO - SVO:

mɔena, Je bhat Ø ar mou, Je khachche maŋso,

Moina who rice and Mou who eating meat

tara bissobiddalɔer chattri

they University-of student

'Moina, who is eating rice and Mou, who meat, are
students of the University'

e. SO - OVS:

mɔena, Je bhat Ø ar maŋso khachche mou, Je,

Moina who rice and meat eating Mou who

tara bissobiddalɔer chattri

they University-of student

'Moina, who is eating rice and Mou, who meat, are
students of the University'

f. SVO - SO:

mɔena, Je khachche bhat ar mou, Je Ø maŋso,

Moina who eating rice and Mou who meat

tara bissobiddalɔer chattri

they University-of student

'Moina, who is eating rice and Mou, who meat, are
students of the University'

g. OVS - SO:

bhat khachche mœna, Je, ar manso Ø mou, Je,
 rice eating Moina who and meat Mou who
 tara bissobiddalœer chattri
 they University-of student
 'Moina, who is eating rice and Mou, who meat, are
 students of the University'

h. SVO - OS:

mœna, Je khachche bhat ar manso Ø mou, Je
 Moina who eating rice and meat Mou who
 tara bissobiddalœer chattri
 they University-of student
 'Moina, who is eating rice and Mou, who meat, are
 students of the University'

The different orders of constituents are available in Bengali due to the relative free word order of a sentence. The reason is that Bengali allows the occurrence of subject, object and verb in a relatively flexible order (cf. 1.2.1). When the verb is deleted from the clause or the sentence, it allows either SO or OS word order, which indicates that either the subject or the object can change their positions in a clause or in a sentence. The occurrence of a verb in a clause or in a sentence also supports this case. The sentence pattern of Bengali clearly indicates that the verb can occur either after the object (SOV and OVS) or before it (SVO). When the verb is deleted from the clause

or the sentence, the sentence pattern of Bengali becomes either SO or OS in the following way: SOV - V \rightarrow SO (minus verb); SVO - V \rightarrow SO (minus verb); and OVS - V \rightarrow OS (minus verb). The different gapping patterns that are shown in (23a-h) do not show any change in sentence meaning but show the movement of different constituents of a relative clause and emphasis on certain constituents especially when the object noun occurs initially in any sentence (cf. 23g). It should also be mentioned that after gapping identical constituents and moving them from their original positions, the sentences show the difference in written and spoken pattern in Bengali. (23a) and (23b) are more acceptable in colloquial pattern than the other sentences that are illustrated in (23).

A statement can be made on the basis of the examples given in (23) that the basic SOV sentence structure can be changed by movement rules. Bengali exhibits eight different patterns when gapping is applied to move constituents in a sentence, and these are shown schematically in (24).

- (24) a. SO SOV
 b. SOV SO
 c. SOV OS
 d. SO SVO
 e. SO OVS
 f. SVO SO

g. OVS SO

h. SVO OS

Among these eight, three are of the Backward Gapping types allowing SO SOV, SO SVO and SO OVS; and five are Forward Gapping, allowing the structural change of a sentence into SOV SO, SOV OS, SVO SO, SVO OS, and OVS SO. In Backward Gapping the sentence always has the SO structure and it is followed by either SOV, SVO, or OVS. In Forward Gapping the sentence receives either SO or OS structure. SO occurs three times in this structure, as against two occurrences of OS. Moreover, Backward Gapping always generates the order SO. So, it can be said that both Forward and Backward Gapping typically generates SO sentence order, though Forward Gapping is more common than Backward Gapping.

It should be mentioned here that no examples has a sentence-initial verb, though a verb can occasionally be placed at the beginning of a sentence or a clause. However, this is not a regular pattern in Bengali and is available only for a certain type of verb with their inflectional endings. Consider the following examples illustrating the movement of verbs.

- (25) a. cheleTa, Je am khachche ar bhat khachche, se
 boy-the who mango eating and rice eating he
 skuler chattro
 school-of student

'The boy, who is eating mango and (is eating) rice, is a school student'

- b. cheleTa, Je am Ø ar bhat khachche, se skuler
boy-the who mango and rice eating he school-
chattro
of student

'The boy, who mango and is eating rice, is a school student

['The boy, who is eating mango and rice, is a school student']

- c. khachche Je cheleTa am ar bhat, se skuler
eating who boy-the mango and rice he school-of
chattro
student

'The boy, who is eating mango and rice, is a school student'

- d. khachche am ar bhat Je cheleTa, se skuler
eating mango and rice who boy-the he school-of
chattro
student

'The boy, who is eating mango and rice, is a school student'

In the examples which are given above, (25d) is more common than (25c), as the object occurs after the verb which makes the sentence more comprehensible. This might indicate that Bengali prefers the object to be next to the verb, either

preceding or following it. There is one interesting point to note that when the verb occurs initially in a clause or a sentence, it also changes the structure of the relative clause. (25a) and (25b) shows the basic pattern of the Bengali relative clause where the head noun occurs before the relative clause and its embedding in the matrix sentence, whereas (25c) and (25d) show the deictic nature of the relative clauses, as Je 'who' occurs before the relative clause. Je + NP can be taken as a deictic relative clause as the head noun becomes deictic due to the occurrence of Je 'who' before it, which is shown in the written pattern of Bengali as Je-NP.

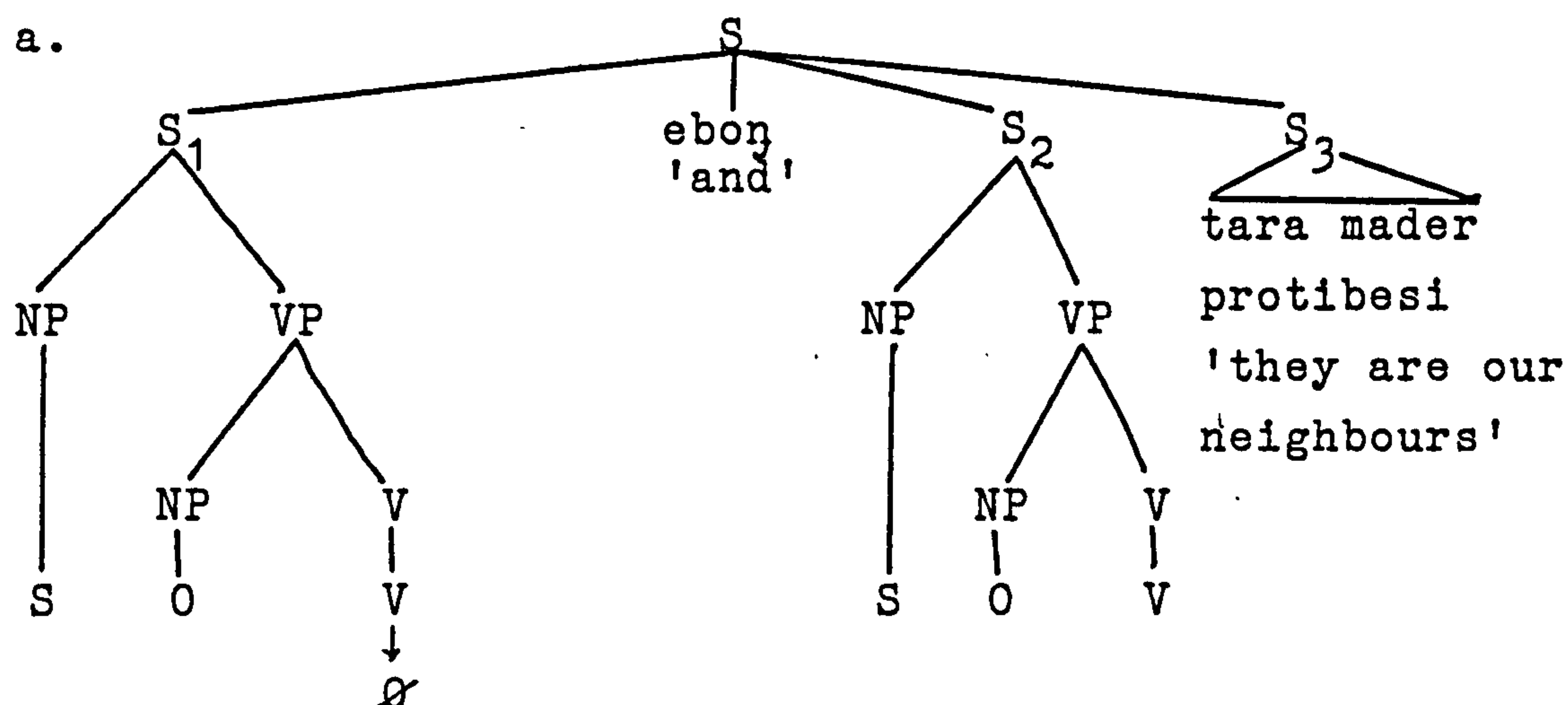
If we compare Bengali with English, we note that English allows only one type of gapping pattern as illustrated in (26).

- (26) a. Joan drank tea and Robin drank coffee.
 b. Joan drank tea and Robin Ø coffee
 c. *Joan Ø tea and Robin drank coffee.

(26) shows that English allows Forward Gapping where the verb is deleted in the second coordinate sentence and the structure of the sentence changes from SV0 to S0.

The way Gapping is applied in Bengali can be shown through the following tree-diagram.

(27) a.



mɛna mach kheechilo

mou maŋso kheechilo

'Moina fish ate

and Mou meat ate'

b. mɛna, Je mach Ø eboŋ mou, Je maŋso kheechilo,
 Moina who fish and Mou who meat ate

tara amader protibesi

they our neighbours

'Moina, who fish and Mou who ate meat, are our
 neighbours'

['Moina, who ate fish and Mou, who ate meat, are
 our neighbours']

6.1.4 Identical Verb Phrases in Relative Clause

If there are two identical verb phrases, gapping can be done both in restrictive and non-restrictive relative clauses. However, only forward gapping is possible in both types of relative clauses (28d, e, f). This shows that if the non-identical object nouns occur in verb phrases, it becomes easier to gap either the first or the second

identical verb in relative clauses (cf. examples 18 & 19).

This is shown in the following examples.

- (28) a. mɔena, Je boi porchilo eboŋ mou, Je boi
Moina who book reading-was and Mou who book
porchilo tara bandhobi
reading-was they friend
'Moina, who was reading a book and Mou, who was
reading a book, are friends'
- b. *mɔena, Je boi porchilo eboŋ mou, Je boi Ø, tara
bandhobi
- c. *mɔena, Je boi porchilo eboŋ mou, Je Ø, tara
bandhobi
- d. mɔena, Je Ø eboŋ mou, Je boi porchilo, tara
bandhobi
- e. mɔena eboŋ mou, Jara boi porchilo, tara bandhobi
who-pl
- f. *mɔena, Je boi Ø eboŋ mou, Je boi porchilo, tara
bandhobi
- g. Je mɔena Ø eboŋ Je mou boi porchilo, tara bandhobi

The examples like (28b, c, f) show that neither Forward nor Backward Gapping is possible when identical verb phrases occur in coordinated structures. However, there is one possibility which can gap the verb from identical verb phrases like (28b, c, f). The possibility is that slight modification of the second antecedent of the relative

clause allows the above sentences to gap the identical verb phrases from the second relative clause. This indicates that though Forward deletion of identical verb phrases is allowed, it does not allow Backward Gapping. This may be illustrated in the following example.

(29) mœna, Je boi porchilo eboŋ mou, Je-o tara

Moina who book reading-was and Mou who-also they

bandhobi

friend

'Moina, who was reading a book and also Mou (who was reading a book), are friends'

6.1.5 Identical Object Gapping

Like verb-gapping, object gapping is equally possible in a coordinate structure. The object may be deleted either in the first or the second conjoined sentence. The way object-gapping takes place in Bengali is shown in the following examples.

(30) a. rœson, Je bhat rãdche ar monJula, Je bhat

Raushan who rice cooking and Monjula who rice

khachche, tara eDinbœra bissobiddalœer chattri

eating they Edinburgh University-of student

'Raushan, who is cooking rice and Manjula, who is

eating rice, are students of the Edinburgh

University' (lit)

- b. rason, Je bhat rãdche ar manJula, Je Ø
 khachche, tara eDinbora bissobiddalœer chattri
 'Raushan, who is cooking rice and Manjula, who is
 eating, are students of the Edinburgh University'
- c. rason, Je Ø rãdche ar manJula, Je bhat khachche,
 tara eDinbora bissobiddalœer chattri
 'Raushan, who is cooking and Manjula, who is
 eating rice, are students of the Edinburgh
 University'

Forward object-gapping is illustrated in (30b), whereas, Backward object-gapping is shown in (30c). When the Forward object-gapping occurs in a conjoined sentence, the structure of the sentence becomes SOV - SV, and, in the case of Backward object-gapping the structure becomes SV - SOV. It may be mentioned here that in the case of verb-gapping, non-identical objects are necessary and in object-gapping non-identical verbs are necessary, otherwise it will yield ungrammatical sentences.

6.1.6 Identical Adverb Gapping

Gapping may also be applied to adverbs in conjoined sentences.' The rules can be formulated after giving examples of gapped adverbs.

- (31) a. amader bandhobi mjena, Je taratari bhat
 our friend Moina who quickly rice

rãdchilo ar mou, Je taratari torkari
 cooking-was and Mou who quickly vegetable
 rãdchilo, tara bhasatotto porche
 cooking-was they Linguistics studying

'Our friend Moina, who was cooking rice quickly
 and Mou, who was cooking vegetable quickly, are
 studying Linguistics'

['Our friend Moina and Mou, who were cooking rice
 and vegetables quickly, are studying Linguistics']

- b. amader bandhobi mœna, Je taratari bhat ar mou,
 Je Ø torkari rãdchilo, tara bhasatotto porche
- c. amader bandhobi mœna, Je Ø bhat ar mou, Je
 taratari torkari rãdchilo, tara bhasatotto porche
- d. amader bandhobi mœna ar mou, Jara taratari bhat
 ar torkari rãdchilo, tara bhasatotto porche

A few possibilities of inserting adverbs and their deletion are shown in the above examples. The same rule which gaps verb and object noun is also applicable to adverbs, and this is illustrated in (31). Forward gapping of adverbs is shown in (31b) and Backward gapping of adverbs in (31c). All these examples show that identical verbs can be used in gapping adverbs and the verb can also be deleted with the adverbs.

6.2 Scrambling

6.2.1 Scrambling Defined

Scrambling is a set of rules which move different constituents of a sentence. Though, as far as Bengali is concerned, it is really a phenomenon of literary language, it can also be applied to the spoken pattern of the language. The speakers occasionally change the position of different constituents in the spoken pattern of the language and the original SOV sentence pattern is not preserved. From this perspective, Scrambling can easily be applied to the spoken pattern of Bengali.

6.2.2 Scrambling in Bengali

Scrambling is able to move nouns, verbs, as well as adjectives, depending on the structure of any individual language which allows the movement of certain constituents in a sentence. Bengali allows scrambling in a simple sentence where the subject and the object in a sentence is easily moveable. However, an initial verb in a sentence or a verb after the subject does not normally allow scrambling of other constituents (see example 20). The Bengali sentence patterns also show that the subject noun and the object noun can become theme, but no other movement is usually possible.

Let us explain how this rule relates to a relative clause.

- (32) a. mou boiTa, Ja porchilo, seTa galper
 Mou book-the which reading-was that story-of
 'The book which Mou was reading was a story book'
- b. boiTa, Ja mou porchilo, seTa galper
 book-the which Mou reading-was that story-of
 'The book, which Mou was reading, was a story book'
- c. boiTa mou porchilo Ja, seTa galper
 book-the Mou reading-was which that story-of
 'The book, which Mou was reading, was a story book'
- (33) a. mou Je- boi porchilo, seTa galper
 Mou which-book reading-was that story-of
 'The book which Mou was reading was a story book'
- b. Je- boi porchilo mou, seTa galper
 which book reading-was Mou that story-of
 'Which book Mou was reading was a story book' (lit)
- c. mou porchilo Je- boi, seTa galper
 Mou reading-was which book that story-of
 'Mou was reading that book which was a story book' (lit)
- (34) a. mou, Je sɔkale boi porche, se
 Mou who morning-in-the book reading she
 bissibiddalɔer chattri
 University-of student

N + V + Relative Pronoun + head noun. The relative clause which shows NP + S structures allows the inanimate relative pronoun at the end of the relative clause (32c); the deictic relative clause does not allow this. In (34), different possibilities of scrambling the constituents of relative clauses are shown. The process allows scrambling of the relative clause (Rel Pron + Prep P + N + V) either Rel Pron + N + V + Prep P, Prep P + N + V + Rel Pron or N + V + Rel Pron + Prep P but not Prep P + V + Rel Pron + N. The reason for not allowing the relative clause (34a) into Prep P + V + Rel Pron + N (34e) is that the occurrence of the relative pronoun Je before the last constituent of the clause which is an inanimate noun, attaches the string on it to be a deictic. It shows that when the relative pronoun occurs close to the head noun (34b), before any prepositional phrase (34d), or close to the end of the clause after any verb, it becomes easier to identify the relative clause structure and the meaning of the relative clause. When Je 'who' occurs elsewhere in the clause, especially before any inanimate noun at the end of the relative clause (boi 'book' is an inanimate noun in 34e), it becomes difficult for a listener to understand the meaning of the relative clause (whether the relative pronoun modifies Mou or book).

6.2.3 Scrambling of Complex Sentences

The above examples illustrate simple movement of constituents, but there are some complex structures, as in (35).

- (35) meeTa, Je₁ mouke₂ æ kTa₃ boi₄ diechilo₅ se amader
 girl-the who Mou-to a book gave she our
 protibesi
 neighbour

'The girl, who gave a book to Mou, is our neighbour'

Examples of scrambling for (35):

- (35) a. meeTa, Je mouke diechilo æ kTa boi, se
 girl-the who Mou-to gave a book she
 amader protibesi
 our neighbour
 'The girl, who gave a book to Mou, is our
 neighbour'
- b. meeTa, Je æ kTa boi mouke diechilo, se
 girl-the who a book Mou-to gave she
 amader protibesi
 our neighbour
- c. meeTa, Je æ kTa boi diechilo mouke, se amader
 girl-the who a book gave Mou-to she our
 protibesi
 neighbour

6.2.4 Change of Word Order in Relative Clause

The following examples are given to show the change of word order which occurs inside the relative clause.

- (36) a. mouke / Je meeTa (meeTa, Je) æ kTa boi
 mou-to who girl-the a book
 diechilo / se amader protibesi
 gave she our neighbour

'To Mou, the girl who gave a book, is our neighbour' (lit)

['The girl who gave a book to Mou is our neighbour']

- b. mouke / æ kTa boi diechilo Je meeTa (meeta,
 Mou-to a book gave who girl-the
 Je) / se amader protibesi
 she our neighbour

'To Mou, a book gave the girl who is our neighbour' (lit)

['The girl who gave a book to Mou is our neighbour']

- c. mouke diechilo æ kTa boi / Je meeTa (meeTa,
 Mou-to gave a book who girl-the
 Je) / se amader protibesi
 she our neighbour

'To Mou, a book gave the girl who is our neighbour' (lit)

['The girl who gave a book to Mou is our neighbour']

- d. mouke / Je meeTa (meeTa, Je) diechilo æ kTa
 Mou-to who girl-the gave a
 boi / se amader protibesi
 book she our neighbour
 'To Mou, the girl who gave a book, is our
 neighbour' (lit)

['The girl who gave a book to Mou is our neighbour']

- e. mouke diechilo æ kTa boi / Je meeTa (meeTa,
 Mou-to gave a book who girl-the
 Je) / se amader protibesi
 she our neighbour
 'To Mou gave a book the girl who is our neighbour'
 (lit)

['The girl who gave a book to Mou is our neighbour']

- (37) a. æ kTa boi mouke diechilo / Je meeTa (meeTa,
 a book Mou-to gave who girl-the
 Je) / se amader protibesi
 she our neighbour
 'A book gave to Mou the girl who is our neighbour'
 (lit)

['The girl who gave a book to Mou is our neighbour']

- b. æ kTa boi diechilo mouke / Je meeTa (meeTa,
 a book gave Mou-to who girl-the
 Je) / se amader protibesi
 she our neighbour
 'A book gave to Mou the girl who is our neighbour' (lit)
 ['The girl who gave a book to Mou is our neighbour']

c. æ kTa boi / Je meeTa (meeTa, Je) mouke diechilo /
 a book who girl-the Mou-to gave
 se amader protibesi
 she our neighbour
 'A book the girl who to Mou gave is our neighbour'
 (lit)

['The girl who gave a book to Mou is our neighbour']

d. æ kTa boi mouke / Je meeTa (meeTa, Je)
 a book Mou-to who girl-the
 diechilo / se amader protibesi
 gave she our neighbour
 'A book to Mou, the girl who gave, is our
 neighbour' (lit)

['The girl who gave a book to Mou is our neighbour']

e. æ kTa boi diechilo / Je meeTa (meeTa, Je) mouke /
 a book gave who girl-the Mou-to
 se amader protibesi
 she our neighbour
 'A book gave the girl who to Mou, is our
 neighbour (lit)

['The girl who gave a book to Mou is our neighbour']

f. æ kTa boi / Je meeTa (meeTa, Je) diechilo mouke /
 a book who girl-the gave Mou-to
 se amader protibesi
 she our neighbour
 'A book the girl who gave to Mou, is our
 neighbour' (lit)

['The girl who gave a book to Mou is our neighbour']

In (35), the antecedent of the relative clause occurs initially, the indirect object in (36) and the direct object in (37). When the constituents of a sentence include a relative clause (34), then the constituents of the sentence can be scrambled in numerous ways. The initial string of the sentence could be the antecedent of the relative clause (35), an indirect object NP (36), or a direct object NP (37). The final part of the clause may be either a noun phrase (36b, c; 37a, b), a verb phrase (35b, 36a, 38c, d), a direct object NP (35a, 36d) or an indirect object NP (35c). The middle part of the sentence shows numerous movements under scrambling. The constituents which occur in the middle part of the clause can undergo scrambling to give the following sequences: IO-V (35a), DO-IO (35b), DO-V (35c), NP-DO (36a), DO-V (36b), V-DO (36c), IO-V (36d), V-DO (36e), IO-V (37a), V-IO (37b), NP-IO (37c), IO-NP (37d), V-NP (37e), IO-V (37f). The way scrambling is applied will be easy to observe if we give the sentence patterns of (35 - 37) in the following way:

- (38) a. NP IO V DO ...
 b. NP DO IO V ...
 c. NP DO V IO ...
 d. IO NP DO V ...
 e. IO DO V NP ...
 f. IO V DO NP ...

- g. IO NP V DO ...
- h. IO V DO NP ...
- i. DO IO V NP ...
- j. DO V IO NP ...
- k. DO NP IO V ...
- l. DO IO NP V ...
- m. DO V NP IO ...
- n. DO NP V IO ...

Though verbs typically occur in sentence-final position other constituents may also occur sentence-finally: e.g. DO, IO, or a NP. Moreover, IO, V, DO, NP can interchange their positions in a clause.

The preceding examples clearly disprove the earlier statements by Ross (1967), Hankamer (1979) and others that SOV languages do not have scrambling rules.

6.2.5 Gapping and Scrambling

The next step is to examine how Gapping and Scrambling interact. According to the rule (Ross 1970: 253) Gapping may be applied before or after Scrambling. We can test both procedures whether before or after Scrambling is applicable in Bengali. Consider the following sentences where Gapping is applied.

(39) a. Forward Gapping (before Scrambling)

mou, Je bhat khachche ar Dim khachche, se
 Mou who rice eating and egg eating she
 bhalo mee

nice girl

'Mou, who is eating rice and (is eating) egg, is
 a nice girl'

--> mou, Je bhat khachche ar Dim Ø, se bhalo mee
 Mou who rice eating and egg she nice girl
 'Mou, who is eating rice and egg, is a nice girl'

b. Scrambling (after Gapping):

i. mou, Je khachche bhat ar Dim, se bhalo mee
 Mou who eating rice and egg she nice girl
 'Mou, who is eating rice and egg, is a nice girl'

ii. mou, bhat khachche ar Dim Je, se bhalo mee
 Mou rice eating and egg who she nice girl

c. Backward Gapping

mou, Je bhat ar Dim khachche, se bhalo mee
 Mou who rice and egg eating she nice girl
 'Mou, who is eating rice and egg, is a nice girl'

d. Scrambling (after Gapping)

Dim ar bhat khachche mou Je, se bhalo mee
 egg and rice eating Mou who she nice girl
 'Mou, who is eating rice and egg, is a nice girl'

It seems quite clear from the above examples that Forward and Backward Gapping interact with Scrambling. In English, Forward Gapping must be applied before Scrambling and Backward Gapping can be applied only after Scrambling. In (39), Scrambling is applied after Forward Backward Gapping, which indicates that both Forward Backward Gapping can be applied in Bengali before Scrambling. Though only Forward Gapping is applied before Scrambling in English, Bengali allows both the applications before Scrambling. Now we can examine whether Backward Gapping, or both Forward and Backward Gapping are allowed before Scrambling in Bengali.

Scrambling (before Gapping):

- a. mou, Je bhat khachche ar Dim khachche, se bhalo
 Mou who rice eating and egg eating she nice
 mee
 girl
 'Mou, who is eating rice and (is eating) egg, is
 a nice girl'
- b. mou, bhat khachche Je, ar Dim khachche, se bhalo
 Mou rice eating who and egg eating she nice
 mee
 girl
- c. mou, Je khachche bhat ar khachche Dim, se bhalo
 Mou who eating rice and eating egg she nice
 mee
 girl

Forward Gapping (of c)

- d. mou, Je khachche bhat ar Ø Dim, se bhalo mee
 Mou who eating rice and egg she nice girl
 'Mou, who is eating rice and egg, is a nice girl'

Backward Gapping (of c)

- e. mou, Je Ø bhat ar Dim khachche, se bhalo mee
 Mou who rice and egg eating she nice girl
 'Mou, who is eating rice and egg, is a nice girl'

Examples that are given in (39) and (40) clearly show that both Forward and Backward Gapping can be applied before and after Scrambling, and the result will be grammatical in either case.

The investigation shows that the notion of Gapping and Scrambling can be easily applied to Bengali as the sentence patterns allow free movement of the words and deletion of one of the identical objects, adverbs or verbs.

The Gapping and Scrambling rules are interesting in the sense that when they are applied to Bengali, one sentence shows various structural patterns which is difficult to express in English through the translation of Bengali sentences. The reason is that English sentences do not show as many variations in Gapping and Scrambling.

6.3 Topicalization

6.3.1 Topicalization Defined

The term 'topic' is used in Linguistics to mark the starting point of the speaker's message in a sentence and 'Topicalization' is a process of movement, which moves the topic to sentence-initial position. From this respect, topicalisation can be regarded as the fronting of certain constituents in a sentence. Topic is usually marked on the subject in unmarked simple sentences in Bengali and no movement is necessary. When the structure of the sentence is SOV, and the topic is marked on the object, then the movement of the object becomes necessary. In that case the object occurs initially in the sentence, then the subject moves to the end of the sentence and the word order of the sentence changes from SOV to OVS. The original SOV word order of a Bengali sentence changes in the direction of the movement of topicalized constituent in a sentence. This is shown in the following example (cf.1.2.5).

- (41) a. cheleTa boi porchilo
 s o v
 boy-the book reading-was
 'The boy was reading a book'
- b. boi porchilo cheleTa
 o v s
 book reading-was boy-the
 'The boy was reading a book'

- c. boi cheleTa porchilo
 o s v
 book boy-the reading-was
 'The boy was reading a book'

The usual word order (SOV) of a Bengali sentence is shown in (41a), where the subject occurs initially before the object and the verb. The topic of the sentence is cheleTa 'the boy'. The object is shown as the topic in both (41b) and (41c) which occurs initially to the sentence. No movement rule is shown in (41a) as the subject is marked as the topic, whereas the movement of the constituents becomes necessary in (41b) and (41c) as the object of the sentence boi 'book' is marked as the topic and the subject is moved to the final position in (41b) and in medial position in (41c). It should be mentioned here that (41b) and (41c) are given only to show the movement of the subject in different positions in the sentence and in both sentences topic is marked on the same object. The transformational rules for (41b-c) can be illustrated in the following way.

- (41') a. SD: NP N V
 1 2 3 \Rightarrow
 SC: 2 3 1
- b. SD: NP N V
 1 2 3 \Rightarrow
 SC 2 1 3

Rule (41'a) shows the fronting of the object in the subject

position and the movement of the subject to the end of the sentence. The movement of the subject changes the original SOV word order into OVS. Rule (41b) illustrates the fronting of the object in the subject position as the topic, and the movement of the subject to the object position. The movement of the subject changes the sentence from SOV to OSV. Assigning topic on any constituent other than the subject has the result that the unmarked word order of SOV is not retained. This may also be shown in case of a relative clause, which shows the SOV word order which may also be changed due to topicalization rule. When an antecedent occurs either before or inside a relative clause, it is shown as a topic, and if any other constituent of a relative clause is marked as a topic, it has to move initially in place of the antecedent.

- (42) a. Je cheleTa boi porche, se amar bondhu
 who boy-the book reading he my friend
 'Who the boy is reading a book is my friend'
 ['The boy who is reading a book is my friend']
- b. boi Je cheleTa porche, se amar bondhu
 book who boy-the reading he my friend
 'The book who the boy is reading is my friend'
 ['The boy who is reading a book is my friend']

cheleTa 'the boy' is shown as the topic in (42a), which is the antecedent of the relative clause Je boi porche 'Who is reading a book'. The word order in relative clause is

SOV, which is not retained in (42b) after topicalizing the object boi 'book'. (42b) shows the construction of (41b) where the subject occurs in the medial position and the object occurs before the subject.

According to Chomsky (1965: 221), the topic of a sentence is the NP that is immediately dominated by S. Consider the following sentence:

(43) corTa, Jake gramer lokra dhorechilo, se
 thief-the whom-to village-of men caught at he
 durdhorsso
 dangerous

'The thief whom the villagers caught at was dangerous'

In (43), cor 'thief' is the topic, and se durdhorsso 'he is dangerous' is the comment of the sentence. A few more examples are given here to illustrate topic and comment in sentences incorporating relative clauses.

(44) a. cheleTa, Je skule Jae ni, se gunDami
 boy-the who school-to go-did not he hooliganism
 korte p3chondo k3re
 doing like does

'The boy, who did not go to the school, likes hooliganism'

b. bh3ddrolok, Jini sahittik, tini aJ bissobiddal3je
 gentleman who writer he today University-to
 boktrita deben
 talk give-will

'The gentleman, who is a writer, will deliver a talk to-day to the University'

- c. boiTa, Ja Tebiler opore roeeche, seTa amader
book-the which table's on is that our
bissobiddalber laibrerir
University's library-of
'The book, that is on the table, belongs to our
University Library!

As already stated, topic is used to mark the theme in a sentence, which could be either an animate or an inanimate subject or object.

6.3.2 Topic and Comment

A topic combines with a comment, which can be taken as a further statement regarding any animate or inanimate object in a discourse. In this sense, topic is associated with the initial statement of a sentence and comment enlarges the meaning of the previous statement. This is shown in the following example.

- (45) a. pulis corTake dhorechilo -->
 police thief-the. caught
 'The police caught the thief'
- b. corTake pulis dhorechilo
 thief-the police caught
 'The thief the police caught'

['The police caught the thief']

cor 'thief' is the topic of the sentence in (45b) and pulis dhorechilo 'the police caught' is the comment of the sentence as it enlarges the meaning regarding the action of catching the thief. In (45b), comment enlarges the action of the object in the sentence. Mention should be made here of the passive structure of (45b). Passivization is not strictly followed in the Colloquial pattern of Bengali, and is retained only in the written form of the language. The true passive form of (45a) in the written form of the language is like the following: cor pulis dara dhrito hoeechilo (thief-police-by caught was) 'The thief was caught by the police'. However, in Colloquial Bengali dara 'by' and dhrito hoeechilo 'was caught' do not occur as the lexical items show the Sanskrit patterns which are not commonly used in the spoken system of the language.

6.3.3 Topicalization of Object

When the object of a sentence is topicalized it moves backward in a sentence from its former position. As Bengali has SOV word order, when the object is topicalized it occurs either before the verb, subject noun or pronoun. After topicalization, the original word order automatically changes from SOV to OVS when the object occurs before any verb. This shows the fronting of the NP for topicalization. In the case of the occurrence of the object before a

pronoun, the structural pattern of the sentence changes from SOV to OSV. This kind of movement of any constituent in a sentence is possible, but not very common. These are illustrated in (46).

(46) a. SOV - OVS

ami boi bhalobasi

I book like

'I like book(s)'

á. boi bhalobasi ami

book like I

'I like book(s)'

['It's book that I like']

b. SOV - OSV

ami boi bhalobasi

I book like

'I like book(s)'

ḃ. boi ami bhalobasi

book I like

'I like book(s)'

['It's books that I like']

Two ways of topicalizing objects are shown in (46). The main difference between (46a) and (46b) is that, in (46a) the object is placed before the verb like the usual pattern of a Bengali sentence, whereas, it is away from the verb in (46b). (46b) is less acceptable than (46a), as this order

of constituents is not common.

In the examples given so far, relative clauses are not introduced (except in 42, 43 and 44) to show the topicalizing of objects. No problem arises from the inclusion of relative clauses to show the topicalization rule for Bengali. With regard to the topicalizing objects, the following examples are given after introducing relative clauses into the sentences.

- (47) a. boiTa, Ja ami cai, ta hochche galper
 book-the that I want that is story-of
 'The book that I want is a story-book'
- b. phulTa, Ja oi golap gacher, ta
 flower-the which that rose tree-of that
 bissobiddalger udbhidbidda bibhager bagane
 University's Botany department's garden-in
 paoa Jae
 get goes
 'The flower, which is of that rose tree, is
 available in the garden of the Botany department
 to the University' (lit)
- c. ghas, Ja goruTa khachche, ta baJar theke
 grass which cow-the eating that market from
 kena hoeeche
 bought has
 'The grass, which the cow is eating, was bought
 from the market'

In each of the examples, the head noun is the topic: boiTa 'the book', phulTa 'the flower' and ghas 'grass.' are the objects of the relative clause in (47a-c), and they are moved from their original position and fronted for topicalization. One point that should be mentioned here is that when the objects occur in their original positions before topicalization, all sentences (47a & c) except (47b) show relativization, as shown in (47').

- (47') a. ami Je boiTa cai, ta hochche golper
 I which book-the want that is story-of
 'The book that I want is a story book'
- b. oi golap gacher phulTa bissobiddalcer
 that rose tree-of flower-the University's
 udbhiddbidda bibhager bagane paoa Jae
 Botany department's garden-in-the get goes
 'The flower of that rose tree is available in the
 garden of the Botany Department to the University'
- c. goruTa Je- ghas khachche, ta baJar theke
 cow-the which grass eating that market from
 kena hoeeche
 bought has
 'The grass, which the cow is eating, was bought
 from the market'

The subjects of the non-topicalized sentences are ami 'I', golap gach 'rose tree' and goru 'cow' and the objects

follow their subjects in (47). (47a) and (47c) show relativization, where deictic relative pronouns occur before the objects. However, (47b) does not show any relativization, and it can be relativized only after topicalizing the object phul 'flower'. Sentences like (47b) show that relativization may occur for simple sentences due to the fronting of the object as the topic of the sentence.

6.3.4 Topicalization of Constituents of a Relative Clause

There are two ways of topicalizing constituents of a relative clause, depending on the position of the relative clause in a sentence. If the relative clause occurs initially in a sentence there is no obstruction to moving any constituent in the relative clause. As the relative pronoun precedes or follows its antecedent, a constituent from a relative clause can be moved easily in terms of the Scrambling rule. This may be shown in the following examples.

- (48) a. Je- lokTa bose ache, se baJar korte Jabe
 who man-the sitting is he shop doing go-will
 'Who the man is sitting will go for shopping'
- b. lokTa, Je bose ache, se baJar korte Jabe
 man-the who sitting is he shop doing go-will
 'The man, who is sitting, will go for shopping'

The only difference between (48a) and 48b) is that Je 'who'

occurs prenominally (as Je + NP) in (48a) and postnominally (as NP + S) in (48b) without changing the basic meaning of the clause. Moreover, (48a) allows the verb to be topicalized, as shown in (49).

- (49) bose ache Je lokTa, se baJar korte Jabe
 sitting is who man-the he shop doing go-will
 'Who the man (the man, who) is sitting will go
 for shopping'

The verb bose ache 'is sitting' which occurs after the postcedent in (48a) is topicalized after moving it to initial position in (49). The verb which occurs in (48b) after the antecedent, can also be fronted like the one shown for (48a), but the fronting rule for (48a) becomes more comprehensible than (48a) which does not show the colloquial pattern of Bengali. The fronting of the said verb for (48b) is shown in (50).

- (50) bose ache lokTa Je, se baJar korte Jabe
 sitting is man-the who he shop doing go-will
 'The man, who is sitting, will go for shopping'

Note the unacceptibility of (51b) and (52b), with a relative clause in final and medial position and the implication of embedding.

- (51) a. paser ghore gelei tumi tãke dekhte pabe,
 next room-in going you him see will

bhaddrolok, Jini Dhaka theke esechen

gentleman who Dacca from come-has

'You will see the gentleman going to the next room who has come from Dacca'

b. *bhaddrolok, Jini paser ghore gelei tumi take

gentleman who next room-in going you him

dekhte pabe, Dhaka theke esechen

see-will Dacca from come-has

'The gentleman, who you will see going to the next room, has come from Dacca'(lit).

(52) a. tumi bolechile, Jini boi porchen, tini, ^{tomar} bondhu
you said who book reading he ^ ^{your} friend

'You said that who is reading a book is your friend'

b. *Jini, tumi bolechile boi porchen, tini tomar

who you said book reading he your

bondhu

friend

'Who, you said is reading a book, is your friend'

(lit)

The above problem can be averted if the whole relative clause is moved to the beginning of a sentence considering the clause as a single constituent.

(53) a. bhaddrolok, Jini Dhaka theke esechen, paser ghore
gentleman who Dacca from come-has next room-in

gelei tumi tãke dekhte pabe

going you him see-will

'The gentleman, who has come from Dacca, you
will see him going to the next room' (lit)

b. Jini boi porchen, tumi bolechile tini tomar

who book-reading you said he your

bondhu

friend

'Who is reading a book, you said that he is your
friend' (lit)

['You said that who is reading a book is your
friend']

This kind of transformation is allowed in extraposition and cleft sentences, but not in topicalization. Hence, it should be regarded as void in topicalization.

6.3.5 Primary Topicalization

Hopper (1972: 146) mentions two kinds of topicalization in complement sentences: Primary and Secondary Topicalization. In Primary Topicalization, either subject or object can become topic: they can be called respectively Subject Primary Topic and Object Primary Topic. As I have taken relative clauses, the examples of Primary Topicalization will be illustrated through relative clauses instead of complement sentences.

The following examples illustrate both versions of Primary Topicalization in Bengali.

6.3.5.1 Subject Primary Topic

- (54) a. meeTa, Je boi porchilo, se amader Daklo
 girl-the who book reading-was she us called
 'The girl, who was reading a book, called us'
- b. bhaddrolok, Jini gan sunchen, tini amar bondhu
 gentleman who song listening he my friend
 'The gentleman, who is listening song, is my
 friend'

The subject of the sentence (the antecedent in case of relative clause) becomes topic in Subject Primary Topic. The antecedents in (54a) and (54b) are in unmarked orders of sentences as the subjects in Bengali usually occur initially in any sentence. The process also indicates that when the subject occurs in another position in a sentence, it can be fronted in marked sentences to show the topicalization process. Sentences like (54a) can also occur in the following manner: boi porchilo meeTa Je, se amader Daklo. The subject of the sentence like the latter example can be fronted like (54a) after fronting the subject of the sentence meeTa 'the girl'. The question may arise about the marked and unmarked sentences in Bengali. When a sentence is unmarked it always shows the SOV word pattern and when it is marked for topicalization it may change its word order other than SOV, which is illustrated in (41).

6.3.5.2 Object Primary Topic

When the object of a sentence or a relative clause becomes topic, it may be taken as a Object Primary Topic. This process is shown in the following example.

(55) a. meeTa, Je boi porchilo, se amader Daklo →
 girl-the who book reading-was she us called
 'The girl, who was reading a book, called us'

á. boi porchilo meeTa Je, se amader Daklo
 book reading-was girl-the who she us called
 'The girl, who was reading a book, called us'

(55á) shows the process of Object Primary Topic, where the object of the relative clause boi 'book' is fronted from its former position under topicalization rule. (55a) can be interpreted for marking the subject (meeTa 'the girl') as the topic. (55á) is shown after assigning topic on the object. Both subject primary topic and object primary topic occur in sentence-initial position.

Primary topicalization moves the constituent in the matrix sentence to sentence-initial position. The following examples are given to show the Primary Topicalization in Bengali after introducing relative clauses in the conjoined sentences.

(56) a. Je d3roJa khullo, se mou skuler chattri
 who door opened she Mou school-of student
 'Mou is a school student who opened the door'

- b. mou, Je dɔroJa khullo, se skuler chattri
 Mou who door opened she school-of student
 'Mou, who opened the door, is a school student'

- (57) a. Je boi porche, se meeTa mɛenar bandhobi
 who book reading she girl-the Moina's friend
 'Who is reading a book the girl is a friend of
 Moina'

['The girl is a friend of Moina who is reading a
 book']

- b. meeTa, Je boi porche, se mɛenar bandhobi
 girl-the who book reading she Moina's friend
 'The girl, who is reading a book, is Moina's
 friend'

In primary topicalization, the constituent that occurs in the matrix sentence can be shifted initially before the relative clause under topicalization rule. When no constituent is marked as a topic like the sentences (56a) and (57a), the noun that occurs in the matrix sentence after the correlatives (se-mou 'she-Mou' in (56a) and se-meeTa 'she-the girl' in 57a) becomes deictic as it is preceded by coreferential pronoun without any pause (shown by a comma). After topicalization, the constituents move initially from the matrix sentence and the relative pronoun becomes non-deictic due to the comma intonation after them (mou, Je 'Mou, who' in (56b) and meeTa, Je 'the girl, who' in (57b)).

Sentences like (56a) and (57a) show that the constituents which occur in the matrix sentences remain unstressed and when they move forward as topic of the sentences, receive sentence-stress. The topic of the sentence mou 'Mou' and mee 'girl' both occur as the antecedents of the relative clause. Even in simple sentences in Bengali, topic is the constituent which occurs initially after the application of the fronting rule and the comment follows the topic, as shown in the following examples.

- (58) a. mohua bhat khachche
 Mohua rice eating
 'Mohua is eating rice'
- b. bhat khachche mohua
 rice eating Mohua
 'Mohua is eating rice'

In (58a), the subject noun mohua 'Mohua' becomes the topic of the sentence, whereas the object-noun bhat 'rice' becomes the topic in (58b). The meaning of the sentences, which have identical constituents, becomes different due to the topicalization of two different nouns in (58a) and (58b). (58a) shows that the person is mohua 'Mohua', so that mohua becomes the topic and the activity of the subject-noun is shown in the predicate as a comment of Mohua's eating of rice. Likewise, (58b) shows that the subject of the sentence eats many things but at the moment what she is eating becomes the topic of the sentence and nothing else.

The term 'Primary Topic' is applied here in the sense that already the constituent is present in the sentence and when new information is provided, it becomes the topic of the sentence. Sentences like (58a) and 58b) can be explained in terms of the above theoretical background: both mohua 'Mohua' and bhat 'rice' are present in the sentence, but mohua becomes the topic in the first instance where the constituent bhat 'rice' is already present and which, in turn, becomes the topic in (58b).

6.3.6 Adjectives and Adverbs as Topic

Though Hopper (op.cit) mentions only Subject and Object primary topics, we can also consider adjectives and adverbs as topics. The main difference between Hopper's analysis and ours is that in the present discussion more emphasis is placed on the distribution of the various constituents of a sentence. It is shown in the following examples that besides nouns (which may occur either as a subject or an object in a sentence), adjectives and adverbs can be topicalized easily in Bengali. Verbs are not generally topicalized, though they may be. The following examples are given to show the topicalization of noun, adjective and adverb.

(59) Topicalization of Noun

- a. sariTa, Ja mœna kinechilo, ta silker
 sari-the which Moina bought that silk-of
 'The sari that Moina bought is made of silk'
- b. mœna, Je sariTa kinechilo, se amar bandhobi
 Moina who sari-the bought she my friend
 'Moina, who bought the sari, is my friend'

(60) Topicalization of Adjective

- a. putulTa, Ja mou kinechilo, ta sundor -->
 doll-the which Mou bought that beautiful
 'The doll, that Mou bought, was beautiful'
- á. sundor seTa, Je putulTa mou kinechilo
 beautiful that-the which doll-the Mou bought
 'That was beautiful the doll that Mou bought' (lit)

(61) Topicalization of Adverb

- a. bhaddrolok, Jini taratari hãTchen, tini æ kJon
 gentleman who fast walking he a
 Doktor -->
 doctor
 'The gentleman, who is walking fast, is a
 physician'
- á. taratari hãTchen bhaddrolok, Jini, tini æ kJon
 fast walking gentleman who he a
 Doktor
 doctor

'The gentleman, who is walking fast, is a
physician'

- ã. taratari, bhoddrolok, Jini hãTchen, tini ækhon
fast gentleman who walking he a
Daktar
doctor

'The gentleman, who is walking fast, is a
physician'

Topicalizing of noun, adjective and adverb is shown in the above examples. The noun mœna 'Moina' occurs inside the relative clause after the relative pronoun Ja 'which' and is fronted in (59b) to become topic. Two different examples are given in (60) to topicalize the adjective. sundor 'beautiful', which is an adjective, occurs in the final part of the sentence in (60a) and fronted to initial position in (60á) to become topic. (61) shows the topicalization of an adverb which originally occurs inside the relative clause in the unmarked sentence in (61a). (61á) is more acceptable than (61ã) as the verb occurs after the adverb. (61ã) occurs in literary language, whereas (61á) is used in the spoken pattern of the language. Adjectives in sentence-final phrases are difficult to topicalize without moving the head noun too, since the meaning of the adjectives is incomplete without a head noun. The reason is that an adjective must be preceded or followed by a noun, as in lokTa sundor 'The man is handsome' or sundor lokTa 'The handsome man'. From this perspective (60á) is not

fully acceptable, as the adjective (sundor 'beautiful') has been moved from the head noun.

6.3.7 Secondary Topicalization

The main difference between Primary and Secondary Topicalization lies in the nature of putting new information on a constituent in a sentence. The constituent which is old (i.e. already present in a sentence, but not topicalized e.g. (58a) and (58b)) and becomes topic is considered as Primary Topicalization. When a new constituent is introduced in a sentence as a topic and the constituent which gets the sentence-stress can be considered as a rule in secondary topicalization. The constituents which tend to be topicalized under secondary topicalization, also occur in non-initial position or at the end of the sentence and can be fronted to become the topic. When the constituent is fronted from its former position, a relative pronoun (or a pronoun in non-relative sentences) may occur in its vacant place. Chomsky (1965: 221) has formulated the same rule for secondary topicalization when a new constituent is added within the sentence and is placed in front of an S. Hopper (1972: 146) has shown from Indonesian where a new constituent has been introduced in a sentence, which looks more or less like a pronoun and could be placed in front of an S. The pronoun -nja 'their' in Indonesian, itself is an inanimate pronoun which is placed before an inanimate noun.

The following example is taken from Hopper (op.cit) to show the secondary topicalization in Indonesian.

(62) a. pandjang daun pohon itu dua meter

'The length of that tree leaves is two meters'

The constituents daun pohon itu in (62a) can be fronted to yield secondary topicalization after inserting -nja, which follows the constituent pandjang as shown in (62b).

(62) b. daun pohon itu, pandjang-nja dua meter

'The leaves of that tree, their length is two meters'

-nja occurs as the third person singular enclitic pronoun in Indonesian. As Bengali has both inanimate and animate pronouns, it could be shown easily after including Hopper's pronoun inclusion rule (as a new constituent which occurs as a topic marker) in a sentence. According to the rule of secondary topicalization, the first sentence which is not topicalized and is constructed without any topic marker, e.g. a pronoun. The topic marker is included only in the second sentence for topicalization. The following examples are given from Bengali to show secondary topicalization.

(63) a. uccota hochche oi barir Janalagulor tin phut
length is that house-of windows three feet

'The length of that house's windows is three feet' -

á. oi barir Janalagulo, Jader uccota hochche
that house-of windows their length is

tin phuT

three feet

'The windows of that house, their length is three feet'

- b. map hochche oi meeTar Jamagulor collis inci
length is that girl's dresses forty inches
'The length of that girl's dress is forty inches'

- b'. oi meeTar Jamagulo, Jader map hochche collis
that girl's dresses their length is forty
inci
inches

'That girl's dresses, their length is forty inches'

In (63), the (a) and (b) sentences are shown without any topicalization. Secondary topicalization is illustrated in (63á) and (63b') after introducing the inanimate pronoun Jader 'their' in the sentences. oi barir Janalagulo 'the windows of that house' in (63á) and oi meeTar Jamagulo 'the dresses of that girl' in (63b') are fronted initially to show secondary topicalization where Jader 'their' is inserted before uccota 'length' and map 'measure' in (63á) and (63b'). The only difference between Bengali and Indonesian sentences is that the enclitic pronoun -nja occurs with pandjang as pandjang-nja, whereas in Bengali, Jader 'their' (which is equivalent to -nja) occurs as an independent word before uccota 'length', map 'measure'. Apart from the difference of structural properties of the pronouns, they show similarities in topicalization.

The examples that are shown in (63) are without any relative clauses. If a relative clause is introduced, it needs an extra sentence for the coreferential pronoun, which occurs in the matrix sentence. Besides this, the relative pronoun occurs in place of the enclitic pronoun. Otherwise the structure of the relative clause shows identical fronting rule of the constituents that are in (63). Compare the following examples.

- (64) a. uccota hochche oi cheleTar deher cho phuT →
 length is that boy-of-the body's six feet
 'The length of that boy's body is six feet'
- b. oi cheleTar deho, Jar uccota hochche cho
 that boy's body which-of length is six
 phut ta bes moJbut
 feet that quite strong
 'The body of that boy, the length of which is six
 feet, is quite strong'

After topicalizing (64a), Jar 'which' is introduced before uccota 'length' in (64b) as a rule of secondary topicalization. The important rule in secondary topicalization is that unless the enclitic or relative pronoun (in (63) & (64) as a topic marker) is introduced in the sentences, it is impossible to move oi barir Janalagulo 'the windows of that house' (63a') and oi cheleTar deher 'the body of that boy' (64b'). So, examples like (63) and (64) show that secondary topicalization of any noun is impossible unless the topic markers are introduced in the sentences as new constituents.

6.4 Extraposition

6.4.1 Introductory

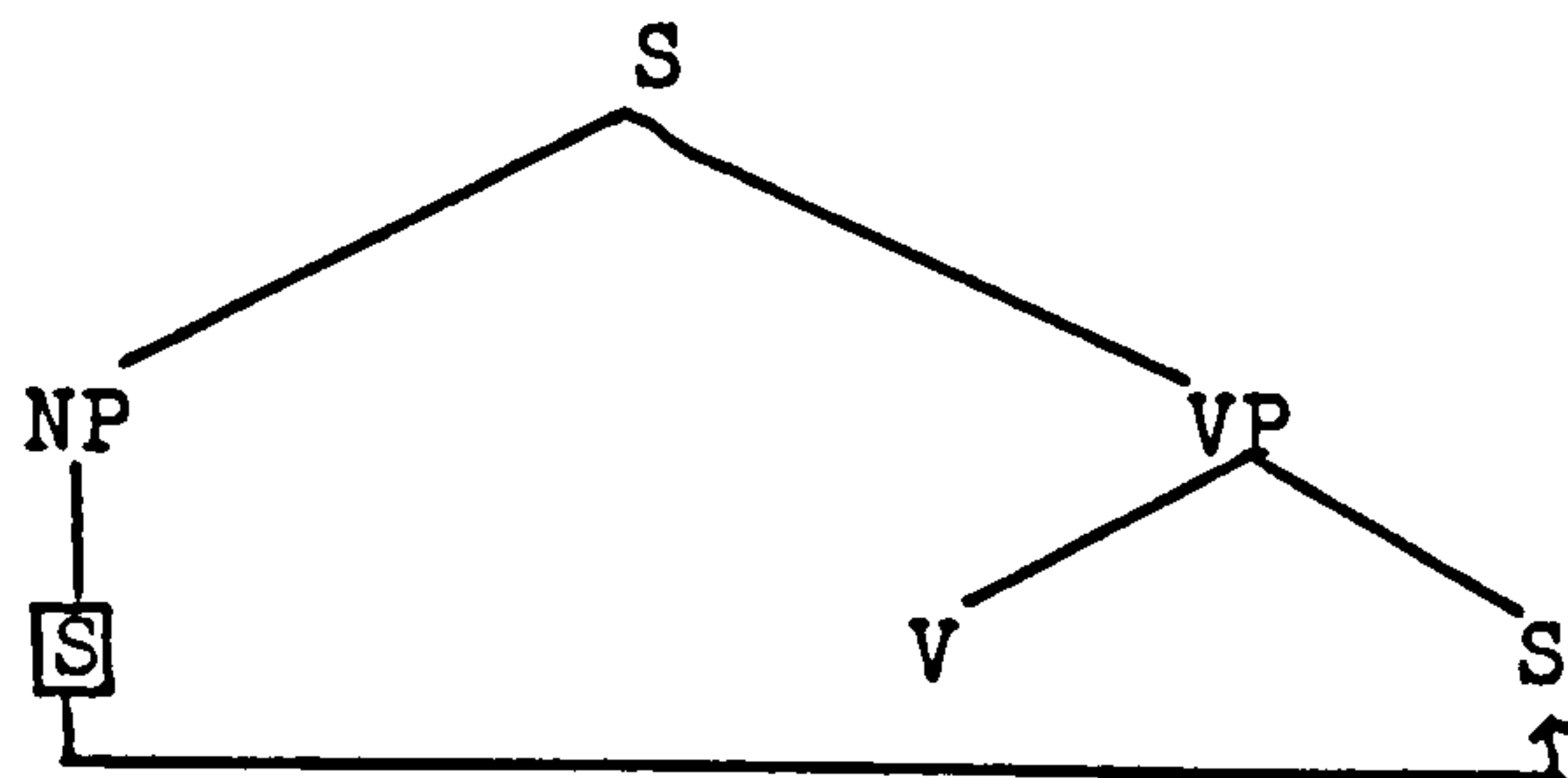
Extraposition is a kind of movement rule which moves a constituent from subject position to the end of the sentence leaving 'it' as a subject in the dummy constituent position, e.g. when a constituent is moved from the subject position to the end of the sentence, 'it' is inserted in the dummy position of the subject after the movement of the constituent from its original position. This kind of movement rule, which is known as Extraposition, is described in the following section with three different types of construction: a. sentences without any complementizers or relative clauses; b. sentences with complementizers; and c. sentences with relative clauses. The main stress here will be on extraposing different types of relative clause in Bengali.

It was Jespersen who first used the term Extraposition, to be followed later by Rosenbaum (1967) and others. Extraposition is a transformational rule by which an embedded clause is moved to the end of the sentence. Rosebaum included both relative and non-relative clauses in his examples. Later, Ross (1967), Lakoff (1968) and Emonds (1976) included the extraposition rule in their discussion. Emonds (1976: 119-122) discussed the function of 'It', which may be used as the antecedent of a sentence. Higgins

(1973) has criticized extraposition analysis but accepted some of Emond's principles. Even Ross's comment that extraposition is not a cyclic but a last cyclic rule has been criticized by Jackendoff (1969: 52-53). There are two formulations of rules which may be given here, the first rule has been proposed by Ross (1967: 179) and the second rule by Higgins (1973: 173) which is identical to Rosebaum's. Both rules are relevant for the present discussion with minor modifications which are necessary for their application to Bengali.

- (65) SD: X - IT - S - Y
 1 2 3 4 \Rightarrow Op
 SC: 1 2 0 4 + 3

(66) a.



b. TebilTa gol ta sotti -->

table-the round that true

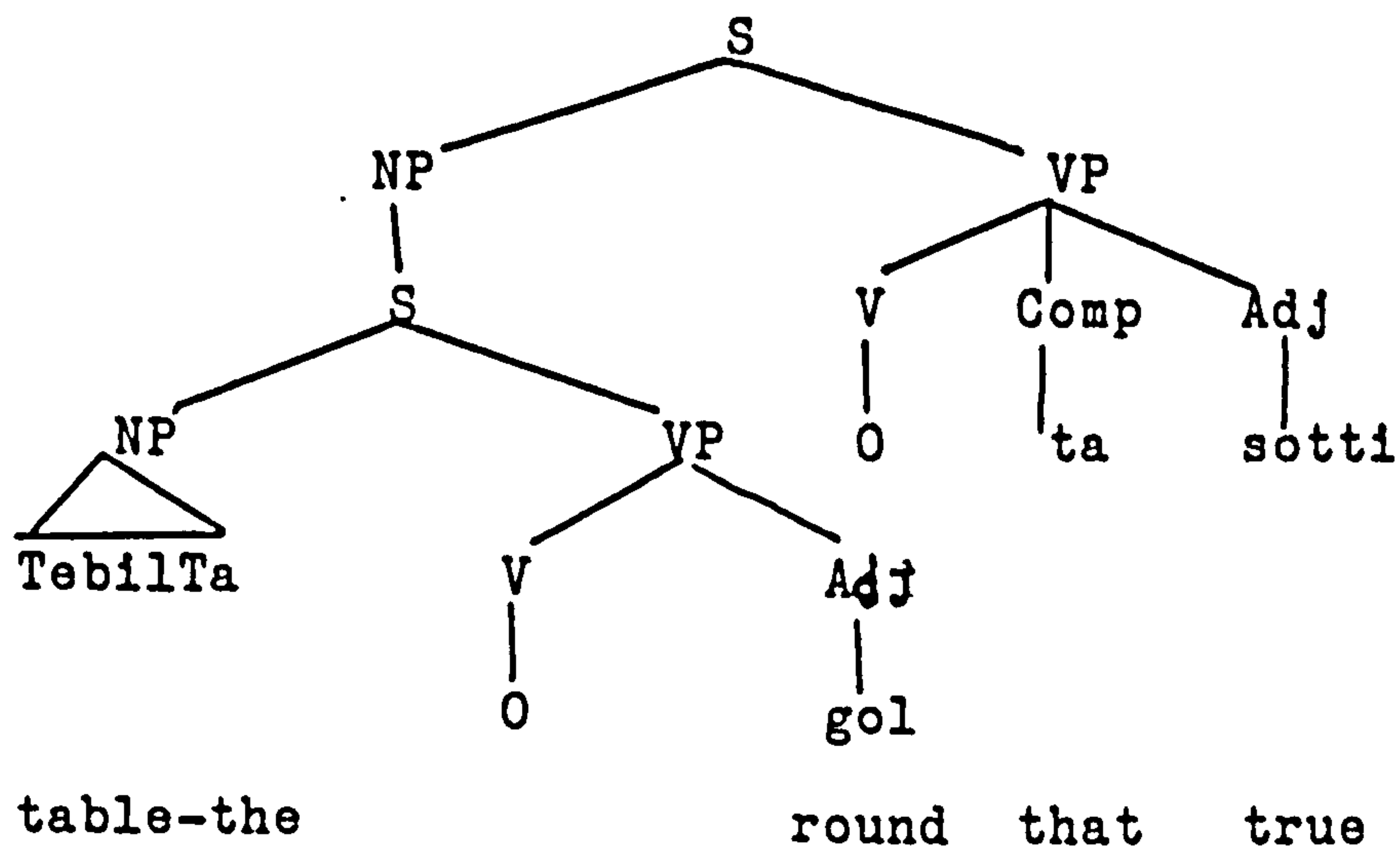
'That the table is round is true'

c. eTa sotti TebilTa gol

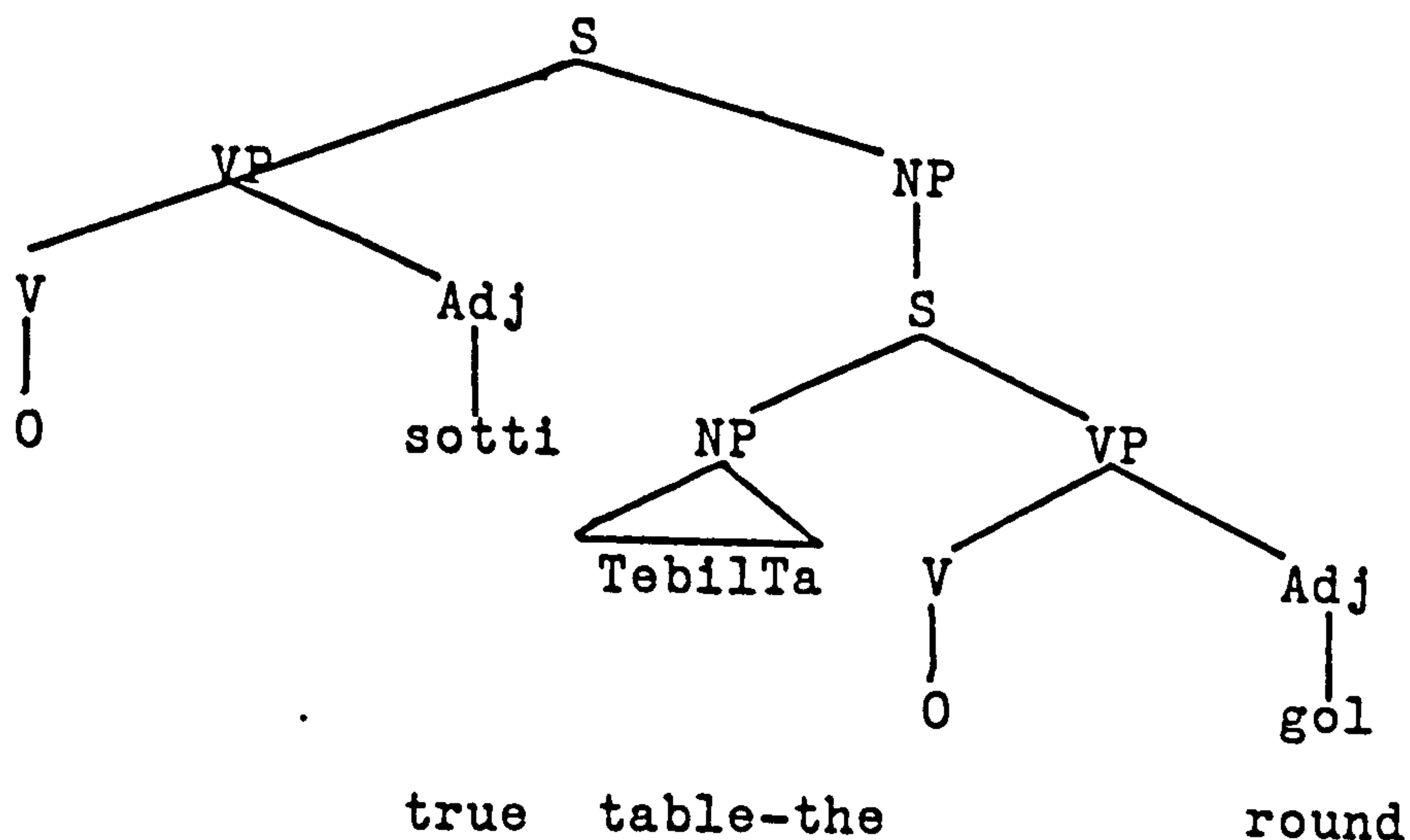
it true table-the round

'It is true that the table is round'

d.



e.

eTa Insertion:eTa sotti.TebilTa gol

it true table-the round

'It is true that the table is round'

The noun phrase complement TebilTa gol 'the table is round' occurs at the beginning of the unextraposed sentence in (66b), it is moved to the end of the sentence by the extraposition rule (66c). The extraposition movement rule replaces the noun phrase complement from the position of the embedded sentence (66b) and moves it to the end of the

sentence (66c). This may be taken as a syntactic procedure where a location of the noun phrase has been shifted from an embedded position to the matrix sentence. (66e) illustrates the way noun phrase complement is moved to the end of the sentence after the application of extraposition rule. On the other hand, the noun phrase complement TebilTa gol 'the table is round' is shown in its embedded position in (66d).

6.4.2 Extraposition in Bengali

Extraposition is an optional transformational rule which is applicable to the noun phrase complement construction. Noun phrases contain both phrase complement and a head noun. When extraposition is applied it moves the complement to the end of the sentence and a pronoun head is used before the complement sentence.

Extraposition in Bengali may be regarded as a copying rule, as it copies the clause which a sentence contains and replaces it by eTa 'it'. The following examples of extraposition on copying rule will make this clear.

- (67) a. mœna Je mouke bhalobase ta niscito
 Moina that Mou-to loves that certain
 'That Moina loves Mou is certain'

- b. eTa niscito Je mæna mouke bhalobase
 it certain that Moina Mou-to loves
 'It is certain that Moina loves Mou'

It can be seen from the above examples how the complement sentence (which is underlined: mæna mouke bhalobase 'Moina loves Mou') is moved from initial position in (67a) to final position in (67b) owing to the copying or movement rule of extraposition. Compare the following sentences.

- (68) a. megh dekhe Je mour nace e kotha mæna
 cloud seeing that peacock dances this word Moina
 bolechilo
 said

'Moina said that the peacock dances seeing the cloud'

- b. eTa mæna bolechilo Je megh dekhe mour
 it Moina said that cloud seeing peacock
nace
 dances

'This Moina said that the peacock dances seeing the cloud'

- (69) a. mæna Je ottonto klanto ta sabai Jane
 Moina that very tired that all know
 'Everyone knows^w that Moina is very tired'

- b. eTa sabai Jane Je mæna ottonto klanto
 it all know that Moina very tired
 'This everyone knows that Moina is very tired'

The important syntactic change which occurs in the noun phrase complement construction due to extraposition may be elaborated with the examples given in (68). (68) is a full length sentence where the noun phrase complement is megh dekhe mour nace 'The peacock dances seeing the cloud', which also contains a sentence mour nace 'The peacock dances'. The whole sentence has been shifted to the end of the main sentence and eTa 'it' is inserted to the initial string of the sentence for the extraposition rule.

6.4.3 eTa - Insertion

We have discussed the pattern of extraposition where the clause is replaced by another pronoun eTa 'it'. This rule may be called 'eTa - insertion' ('It' insertion) and when it drops eTa 'it', it may be called 'eTa - deletion' ('It' deletion). The way eTa 'it' is inserted in the clause is shown in the following example.

- (70) a. tumi Je dhurto ta lɔJJakɔr
 you that cunning that shameful
 'It is shameful that you are cunning'
 ['That you are cunning is shameful']
- b. eTa lɔJJakɔr Je tumi dhurto
 it shameful that you cunning
 'It is shameful that you are cunning'

In (70), a further step is to be noticed in extraposition and the insertion of eTa 'it'. Je 'that' occurs after tumi 'you' in (70a), which has changed its position and occurs before tumi 'you' in (70b). It is clear from (70) that for extraposing the complement clause a further step is needed in Bengali. Sometimes, it is possible to avoid replacing some other items in the clause for eTa 'it', but Je 'that' must be put forward in front of a noun or a pronoun as shown in (71).

- (71) a. lokTa Je cor ta s̄ndehatitbhabe sotto
 man-the that thief that without any doubt true
 'It is without any doubt that the man is a thief'
- b. eTa s̄ndehatitbhabe sotto Je lokTa cor
 it without any doubt true that man-the thief
 'It is without any doubt that the man is a thief'

Je 'that' is placed in between lokTa 'the man' and cor 'thief' in (71a), whereas Je is placed before them in (71b) where lokTa cor 'the man is a thief' occurs as a complement sentence.

The transformational rule can be shown which shifts the position of Je 'that' complementizer after the noun or the pronoun in front of it to get a complement structure.

- (72) a. N (Pron) Je ...
 1 2 \Rightarrow Ob
 2 1

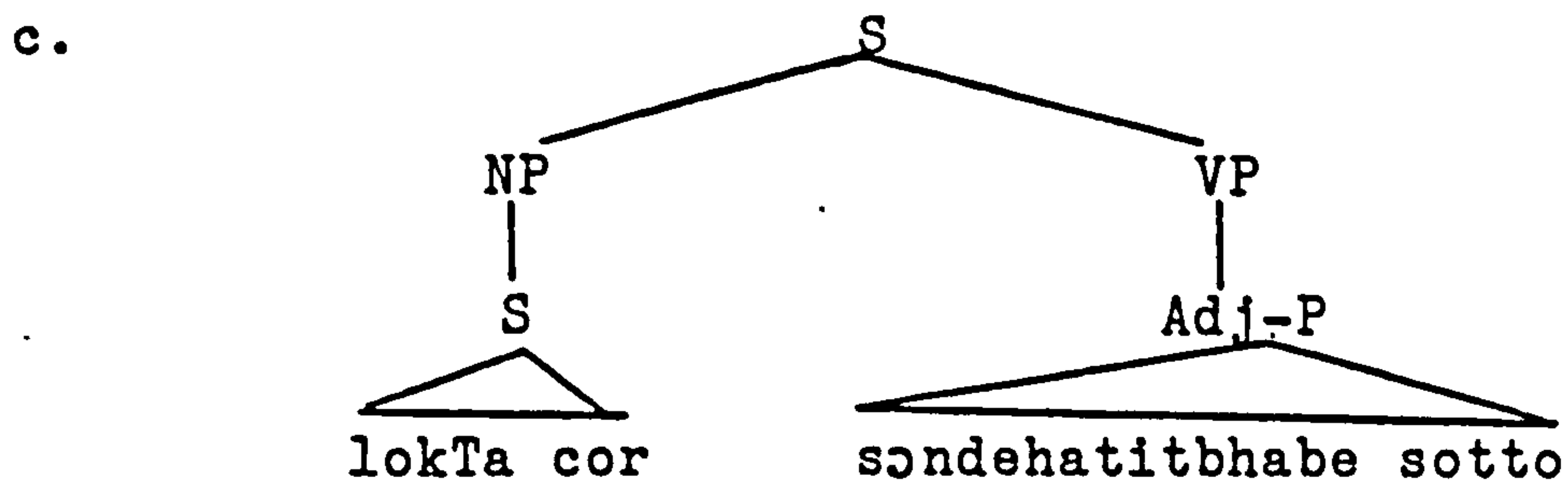
b. SD: X - N - Je - Y
 1 2 3 4 \Rightarrow Ob
 SC: 1 3 2 4

(72b) shows the occurrence of Je 'that' in the unextraposed sentence both after the noun and before it, after the application of the rule of extraposition. This is illustrated in (71).

The way the extraposition is applied to Bengali can be shown through the following example, where the subject NP in the base phrase marker is left empty.

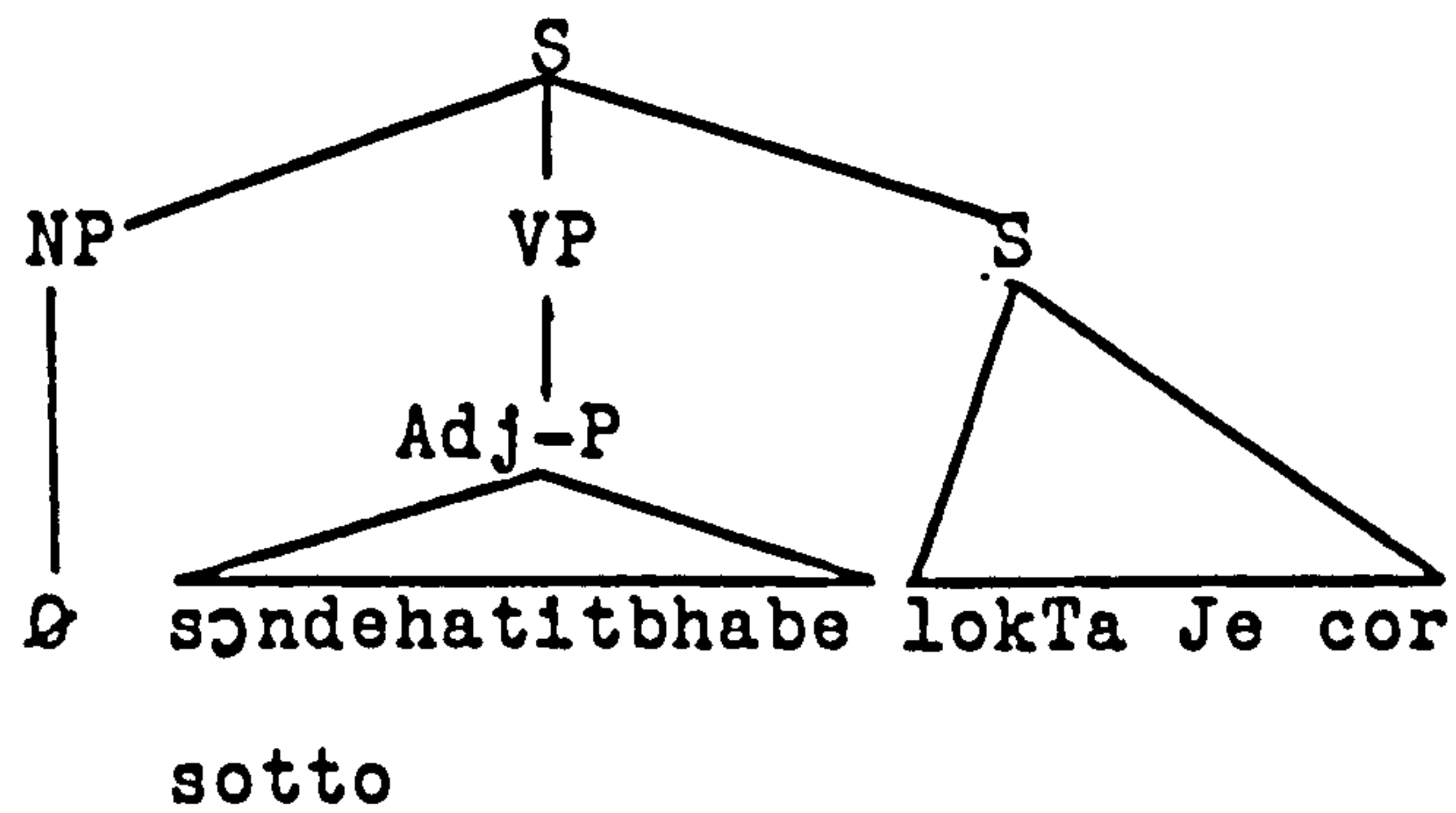
(73) a. lokTa Je cor ta s̄ndehatitbhabe sotto
 man-the that thief that without any doubt true
 'That the man is a thief is true without any
 doubt' (lit)

b. eTa s̄ndehatitbhabe sotto Je lokTa cor
 it without any doubt true that man-the thief
 'It is true without any doubt that the man is a
 thief'

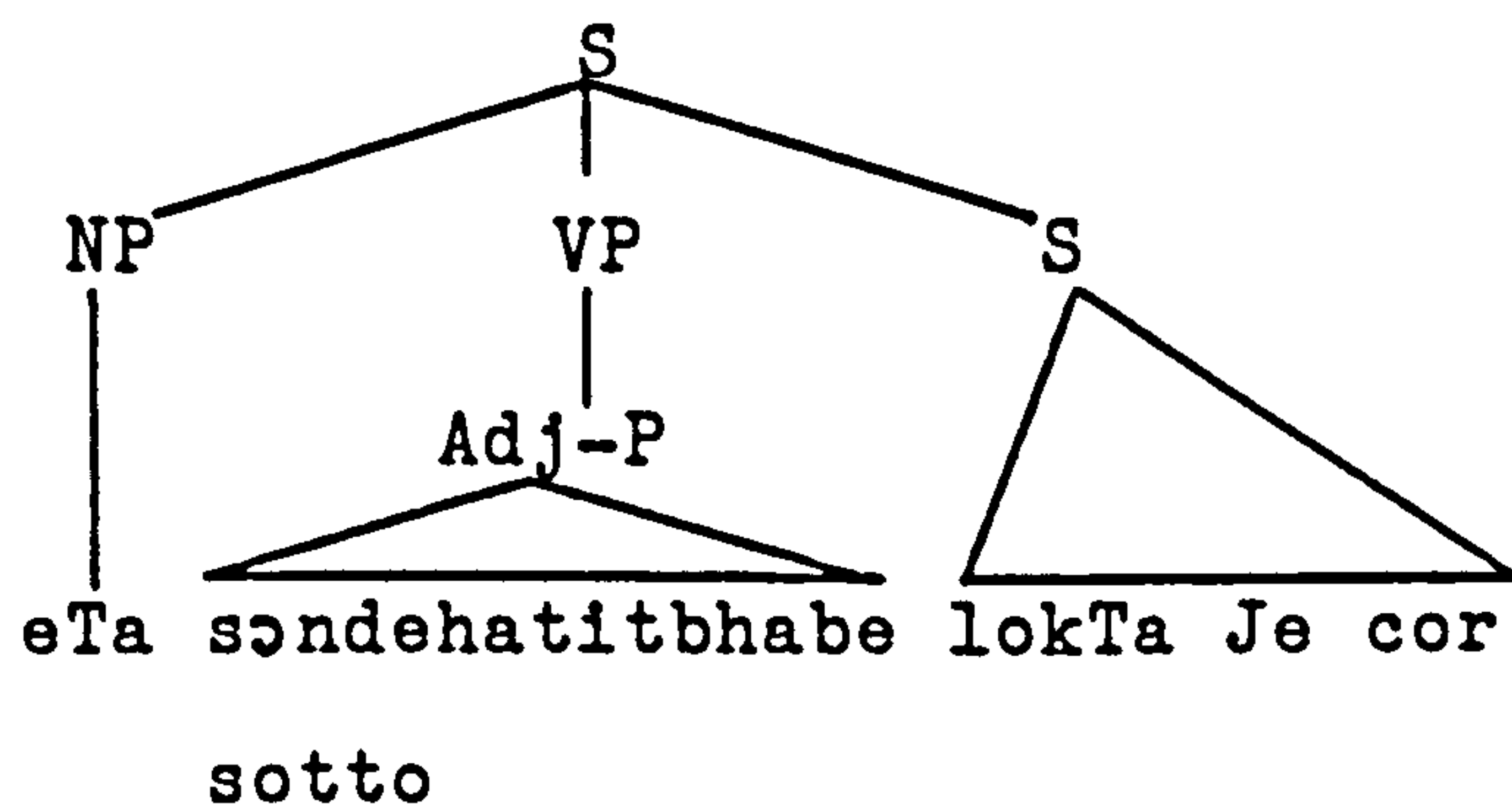


'the man is a thief is true without any doubt'

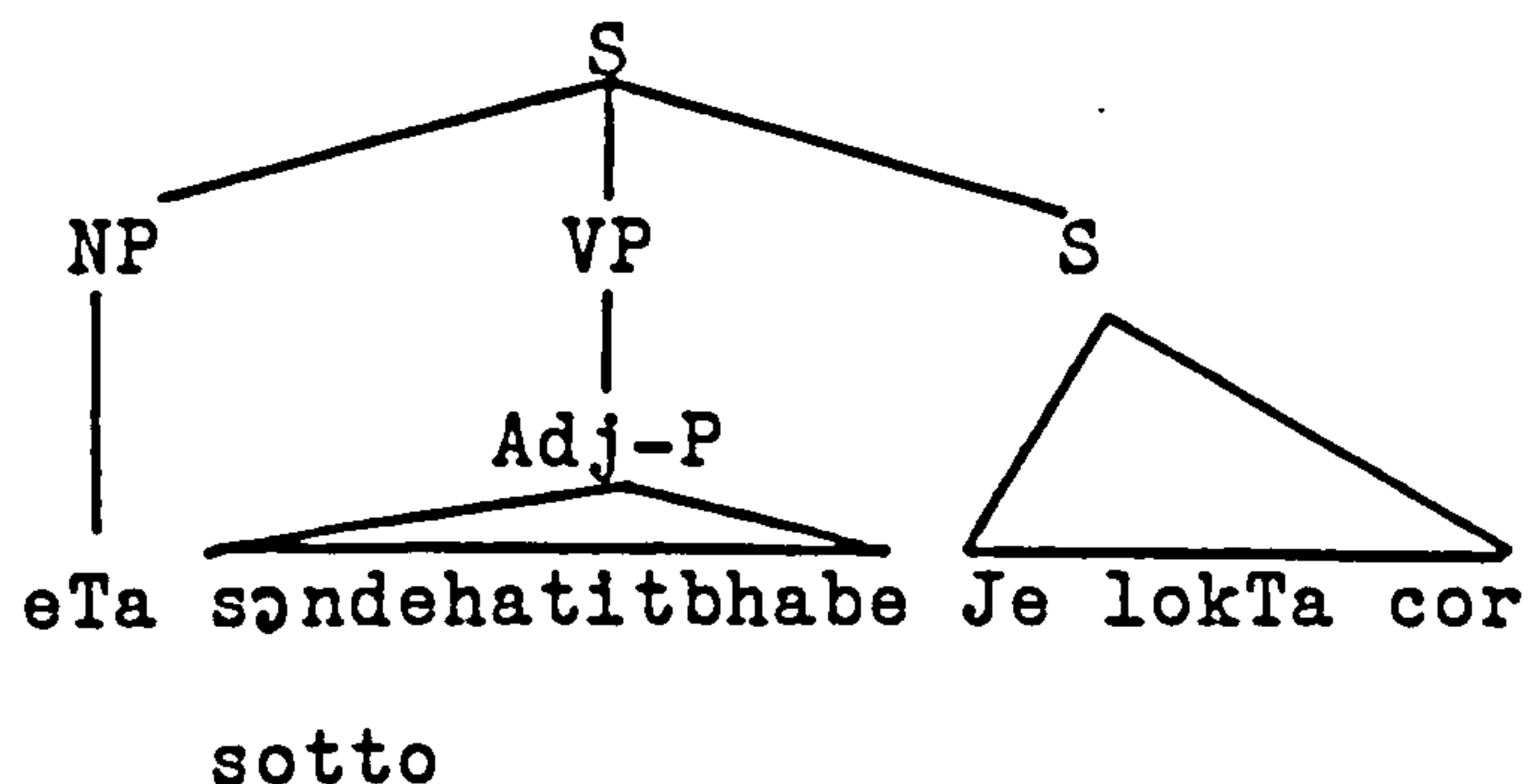
d. After Extraposition:



'is true without that the man is a
any doubt thief'

e. eTa 'it' addition:

'it is true without any doubt that the man is a
thief'

f. Je 'that' shifting:

The obvious problem for extraposition in Bengali
lies with its correlatives, because, in every complex

sentence with any relative clause, the correlative occurs in the matrix sentence to show the embedding of the relative clause in the matrix sentence. The following examples show the distribution of the correlatives.

- (74) a. meeTa, Je₁ amake bhalobase, se₁ kōleJer
 girl-the who me loves she college-of
 chattri
 student
 'The girl, who loves me, is a college student'
- b. JeTa₁ (Je kōtha) tumi bolcho, seTa₁ kaJer
 what (which word) you saying that working
 bæ lae schoJ nōe
 time easy not
 'What you are saying is in practice not easy to do'
- c. ami Jōkhon₁ bhat khachchilam, se tōkhon₁ bose
 I when rice eating-was he then sitting
 chilo
 was
 'He was sitting when I was eating rice'
- d. ami Jōtodin₁ bācbo, tōtodin₁
 I as many days survive-will as many days
 prithibi dekhbo
 earth see-will
 'I will see the earth as long as I will survive'

It is clear from the above sentences (74a-d) that the

correlatives are always present in complex sentences. When the relative clause is extraposed and moved forward to the place of the matrix sentence, the matrix sentence moves forward in place of the relative clause with its correlative. According to the rule of eTa - addition, the correlative must be dropped for eTa insertion. However, in many cases after inserting eTa in place of the correlative, the sentence becomes quite unintelligible to the speakers. This may be shown in the following after inserting eTa as the subject of the sentence.

- (75) a. eTa kōleJer chattri, meeTa, Je amake
 it college-of student girl-the who me
 bhalobase
 loves
 'It is a college student the girl who loves me'
- b. eTa kaJer bæ lae sōhoJ nœ, JeTa tumi bolcho
 it working time easy not what you saying
 'It is not easy to do in practice what you are saying'
- c. *eTa tōkhon bosechilo, Jōkhon ami bhat
 it then sitting-was when I rice
 khachchilam
 eating-was
 'It was sitting when I was eating rice'
- d. *eTa prithibi dekhbo Jōtodin ami bācbo
 it earth see-will as many days I survive-will
 'It will see the earth as long as I will survive'

Except (75a & 75b), the other examples yield ungrammatical sentences after extraposition. (75a) and (75b) are grammatical after eTa insertion as the common noun occurs in (75a) and the inanimate relative marker occurs in (75b). On the other hand, if eTa is not added in the sentence as a subject, (75) yields grammatical sentences after extraposition as shown in (76).

- (76) a. se kɔleJer chattri meeTa, Je amake
 she college-of student girl-the who me
 bhalobase
 loves
 'She is a college student the girl who loves me'
 (lit)
- b. seTa kaJer bæ lae schoJ nɔe, JeTa tumi bolcho
 that working time easy not what you saying
 'That is not easy to do what you are saying'
- c. se tɔkhon bɔse chilo, Jɔkhon ami bhat khachchilam
 he then sitting-was when I rice eating
 'He was sitting when I was eating rice'
- d. tɔtodin prithibi dekhbo, Jɔtodin ami
 so many days earth see-will as many days I
 bācbo
 survive-will
 'So many days I will see the earth as long as I
 will survive'
 ['I shall see the earth for as many days as I
 survive']

It may be said that sometimes eTa-insertion reduces the grammaticality of sentences. Ziv and Cole (1974: 772) have also mentioned for Hebrew that extra-position reduces grammaticality if applied with initial definite determiner. However, this is not the case for Bengali, in which any determiner, definite or indefinite, occurs initially in any sentence (cf. 77).

- (77) a. æ kTa mee, Je gɔtokal bissobiddalɔe Te^ˈnis
 a girl who yesterday University-to Tennis
 khelechilo se eimattro cole gæ lo
 played she just now left
 'A girl just left who played tennis yesterday at
 the University'
- b. æ kTa mee ei mattro cole gæ lo, Je gɔtokal
 a girl just now left who yesterday
 bissobiddalɔe Te^ˈnis khelechilo
 University-at tennis played
 'A girl just left who played tennis yesterday
 at the University'
- c. oi meeTa ei mattro cole gæ lo, Je gɔtokal
 that girl-the just now left who yesterday
 bissobiddalɔe Te^ˈnis khelechilo
 University-at tennis played
 'That girl just left who played tennis yesterday
 at the University'

- d. sei meeTa ei mattro cole gæ lo, Je gɔtokal
 that girl-the just now left who yesterday
 bissobiddalœ Teɳnis khelechilo
 University-at tennis played
 'That girl just left who played tennis yesterday
 at the University'
- e. ei meeTa ei mattro cole gæ lo, Je gɔtokal
 this girl-the just now left who yesterday
 bissobiddalœ Teɳnis khelechilo
 University-at tennis played
 'This girl just left who played tennis yesterday
 at the University'

Different determiners like æ kTa 'a/one', oi 'that', sei 'that' and ei 'this' are shown in the above examples after extraposing the relative clauses. The above examples show that any determiners can be used initially and extraposition can move the relative clause to the end of the sentence.

6.4.4 Extraposition of Relative Clauses

Though extraposition is possible in all kinds of sentences in Bengali, in the case of a relative clause, it becomes easier to extrapose a clause which has a head, this head occurring before the relative pronoun. It is easy to extrapose any relative clause in that position and to move it to the end of the sentence away from its head noun. In the following examples it is shown how a relative clause is

easily extraposed when it occurs with its head.

(78) a. oi lokTa, Je mitar bhai, se, ækhon boi
that man-the who Mita's brother he now book
porche

reading

'That man who is the brother of Mita, is reading
a book now'

b. oi lokTa ækhon boi porche, Je mitar
that man-the now book reading who Mita's
bhai

brother

'That man is reading a book who is the brother of
Mita'

(79) a. oi lokTa, Je Dhaka theke eseche, se, ækhon
that man-the who Dacca from come-has he now
bhat khachche

rice eating

'That man who has come from Dacca is eating rice
now'

b. oi lokTa ækhon bhat khachche, Je Dhaka theke
that man-the now rice eating who Dacca from
eseche

come-has

'That man is now eating rice who has come from
Dacca'

- (80) a. oi lokTa, Je lal suT pore ghure bæ rachche,
 that man-the who red suit wearing loitering
 se bikele amader barite asbe
 he afternoon-in our house come-will
 'That man who is loitering in a red suit will
 come to our house in the afternoon'
- b. oi lokTa bikele amader barite asbe,
 Je lal suT pore ghurebæ rachche
 who red suit wearing loitering
 'That man will come to our house in the afternoon
 who is loitering in a red suit'

The shifting of the relative clause in (79) and (80) shows that combination of shifted relative clause plus verb in clause-final position and (78) shows the extraposition of the verbless relative clause. As the occurrence of a 'being' verb is optional in Bengali sentences, the extraposition of relative clause with or without a verb does not create any problem.

Extraposition of relative clauses is applicable to headed and headless relative clauses. There is not much difference in the syntactic order of the headed relative clauses against the headless relative clauses, which occur without any head noun. Compare the following examples.

- (81) a. ami Jantam Je khelche, se ekTu pærei cole Jabe
 I knew who playing he little after go-will
 'I knew that who is playing will go a little after'

- b. ami Jantam se ekTu pore cole Jabe Je khelche
 I knew he little after go-will who playing
 'I knew that he will go a little after who is
 playing' (lit)

(82) a. sobai Jane Jini esechilen, tini cole gæ chen
 all know who came he left-has
 'All know that who came has left'

- b. sobai Jane tini cole gæ chen, Jini esechilen
 all know he left-has who came
 'All know that he has left who came' (lit)

The above examples (81) and (82) are shown as headless relatives where the relative clauses Je khelche 'who is playing' (81) and Jini esechilen 'who came' occur without any head nouns.

There is one restriction on extraposition in Bengali: if there is a time phrase in the initial clause of the sentence, extraposition is not allowed. If we want to extrapose the relative clause the meaning will be the opposite from its former structure, e.g. unextraposed relative clause. This may be shown in the following example.

- (83) a. kal sokale Jini esechilen, tini
 yesterday morning-in-the who came he
 cole gæ chen
 left-has
 'Who came yesterday morning has left'

- b. *kal sɔkale tini cole gæ chen, Jini csechilen
 yesterday morning-in-the he left-has who came
 'Who came has left yesterday morning'

Je 'who' in (83) occurs as an indefinite deictic without any antecedent of the relative clause. In (83a), it means that the person has left who came yesterday morning, but after extraposing the relative clause it means 'who came has left yesterday morning'. So, after applying the extraposition to the relative clause, the sentence structure of (83b) becomes different from (83a) and is not related to (83a). Sentence (83) indicates that if the initial element occurs before a relative clause and conveys the meaning of 'time', it cannot be extraposed. However, other pronouns which indicate 'place' or 'reason' or something like this allow relative clauses to be extraposed. Sentences like (83) can also be explained on the distribution of the relative pronoun and the correlative element. After moving the relative clause to the end of the sentence, the splitting up of the relative and correlative pronouns may affect the meaning of the sentence which contains a time phrase.

6.4.5 Non-restrictive Relative Clauses cannot be Extraposed

Ziv and Cole (1974) as well as Emonds (1979) have mentioned in their discussion that non restrictive or appositive relative clauses cannot be extraposed. The main

reason for this view is that as extraposition from NP is a movement rule, extraposition for non-restrictive relative clauses damages the appositive nature of the relative clauses. In restrictive relative clauses a sentence is made without a comma in between the relative clause and the matrix sentence, which is not possible for the non-restrictive relative clauses as without any comma after the antecedent a clause is unable to qualify as a non-restrictive clause. When a relative clause is moved to the end of the sentence and the matrix sentence is moved to the place of the relative clause, the relative clause conveys a different meaning. This may be shown in (84).

- (84) a. bhəddrolok, Jini amader sikkhok, tini amader
gentleman who our teacher he our
barite esechen
house-to come-has
'The gentleman, who is our teacher, has come to
our house'
- b. bhəddrolok amader barite esechen, Jini amader
gentleman our house-to come-has who our
sikkhok
teacher
'The gentleman has come to our house who is our
teacher'

In (84a), Jini amader sikkhok 'who is our teacher' is the relative clause which modifies the antecedent bhəddrolok

'gentleman'. After moving the relative clause to the end of the sentence in (84b), the matrix sentence tini amader barite esechen 'he has come to our house' occurs in place of the original relative clause and which also modifies the antecedent bhəddrolok 'gentleman'. So, due to extraposing the relative clause in the non-restrictive clause the meaning of the two sentences becomes non-identical.

However, there is one possible way to move the relative clause along with its antecedent at the end of the sentence to avoid the difference in meaning in two sentences like (84a) and (84b). This may be shown in the following examples.

- (84) a. bhəddrolok, Jini amader sikkhok, tini amader
gentleman who our teacher he our
barite esechen
house-to come-has
- b. tini amader barite esechen, bhəddrolok, Jini
he our house-to come-has gentleman who
amader sikkhok
our teacher
'He has come to our house the gentleman, who is
our teacher'

If the relative clause is moved along with its antecedent as shown in (84b), the meaning of both sentences (84a-b), remains unchanged even after moving the relative clause of the non-restrictive sentence due to extraposition rule.

6.4.6 Extrapolation of PP and NP

There are two transformations that can be applied in extraposing the NPs to the end of the sentence. The first one is called the Extrapolation of PP and the second one the Extrapolation of NP as pointed out in Culicover (1976: 156). The Extrapolation of PP as illustrated for English by Culicover is not precisely paralleled in Bengali, since Bengali does not allow a PP as a modifier of a NP. Where English optionally has modifiers in this form in surface structure (as opposed to relative clause), Bengali uses a relative clause. In such cases, Extrapolation involves the moving of the whole relative clause and not simply the PP contained in it. (85a) shows the extrapolation of PP in English and (85b, c) is given for Bengali to show the movement of the whole clause containing a PP.

6.4.6.1 Extrapolation of PP

(85) a. A girl from Dacca enrolled in the class.

A girl enrolled in the class from Dacca.

b. æ kTa mee, Je Dhaka theke esече, se jnek

a girl who Dacca from come-has she many

Jinis songe eneche

things with brought-has

'A girl who has come from Dacca has brought many things with her'

- c. æ kTa mee ɔnek Jinis songe eneche, Je Dhaka
 a girl many things with come-has who Dacca
theke esече
 from come-has
 'A girl has brought many things with her who has
 come from Dacca'

In the examples which is given to show the Extraposition of PP, the coreferential pronoun is deleted after shifting the relative clause to the end of the sentence. The deletion of the correlative became possible as the antecedent occurs in the relative clause and the matrix sentence precedes the relative clause (cf.2.1.2).

There are three possible ways of extraposing an NP which are shown below. All these rules are mentioned in Ross (1967).

6.4.6.2 Extraposition from NP

- (86) a. æ kTa mee, Je bes bhalo, se mukto nie esече
 a girl who quite good she pearl brought has
 'A girl, who is quite good, has brought pearls
 with her'
- á. æ kTa mee mukto nie esече, Je bes bhalo
 a girl pearl brought has who quite good
 'A girl has brought pearls who is quite good'
- b. oi horinTa, Je doure palachche, se boner
 that deer which running away it forest-of

moddhe thake

in stay

'The deer which is running away stays in the forest'

b. oi horinTa boner moddhe thake, Je doure
that deer-the forest-of in stay which
palachche

running away

'The deer stays in the forest which is running away'

6.4.6.3 Complex NP Shift

(87) a. se, Je lokTa bari kinechilo, take cinto
he who man-the house bought him knew
'He, the man who bought a house, knew him' (lit)

á. se take cinto, Je lokTa bari kinechilo
he him knew who man-the house bought
'He knew him, the man who bought a house'

b. se Taka dhar caibe meeTa, Je tar bandhobi,
she money loan ask-will girl-the who her friend
tar kach theke
her near from
'She will ask for a loan from the girl who is her friend'

b. se tar kach theke Taka dhar caibe, meeTa,
she her near from money loan ask-will girl-the

Je tar bandhobi

who her friend

'She will ask for loan from the girl who is her friend'

6.4.6.4 Extraposition from Sentential Subject

(88) a. cheleTa, Je porikkhate bhalo korbe, se amar
boy-the who exam-in well do-will he my
bondhu
friend

'The boy, who will do well in his examination, is my friend'

á. se amar bondhu, cheleTa, Je porikkhate bhalo
he my friend boy-the who exam-in well
korbe
do-will

'He is my friend the boy, who will do well in his examination'

b. TuTu Je mouer sari pherot dæ eni, eTa amader
Tutu that Mou's sari return gave-not it our
khub kharap legechilo
very bad felt

'We felt very bad that Tutu did not return Mou's sari'

ḃ. eTa amader khub kharap legechilo Je, TuTu mouer
it our very bad felt that Tutu Mou's

sari pherot dæ eni

sari return gave-not

'It gave us very bad feeling that Tutu did not
return Mou's sari'

Extraposition of Complex-NP is shown in (87), where the relative clause is composed with two nouns in a noun phrase. lok 'man' and bari 'house' are two nouns in the same clause in (87a), whereas, mee 'girl' and Taka 'money' are two nouns which constitute the noun phrase in (87b). The relative clause cheleTa porikkhate bhalo korbe 'the boy will do well in the examination' in (88a) and TuTu mouer sari pherot dæ eni 'Tutu did not return Mou's sari' in (88b) occur as the sentential NP as they modify the entire matrix sentence. (88b) shows Je 'that' as a complementizer in the complement sentence.

The following transformational rules can be formulated for the three types of extraposition which are applicable to Bengali.

(89) Transformational Rule for Extraposition from NP:

X	-	NP	-	Y
1		2		3
			\Rightarrow	Op
1		3		2

(90) Transformational Rule for Complex-NP Shift:

X	-	NP	-	S	-	Y	
1		2		3		4	\Rightarrow Op
1		4		2		3	

(91) Transformational Rule for Extraposition of Sentential Subject:

X	-	S	-	NP	-	Y	
1		2		3		4	$\Rightarrow Op$
1		$eTa+3$		2		4	

The working of transformational rules of the three varieties of extraposition is shown as the following:

(92) Extrapolation from NP

[illegible]

amader debe, ta mitthe nœ
 ³

us give-will that untrue not

'Our demand is that you will give us your used books is not untrue' (lit)

['Our demand is not untrue that you will give us
your used books']

SC: amader dabi mitthe nœ Je tomar bæ borhito
 1 3 2
our demand untrue not that your used

boigulo amader debe

books us give-will

'Our demand is not untrue that you will give us

your used books'

1 2 3 ⇒ 1 3 2

(93) Extraposition from Complex-NP Shift

SD: se mach kinlo lokTa, Je barite mach bikkri
 1 2 3
 he fish bought man-the who house-to fish sell
korte esechilo, tar kach theke
 4
 doing came him near from

'He bought fish from the man who came to sell it
 to the house'

SC: se tar kach theke mach kinlo lokTa, Je barite
 1 4 2 3
 he him near from fish bought man-the who house-to
mach bikkri korte esechilo
 fish sell doing came

1 2 3 4 ⇒ 1 4 2 3

(94) Extraposition of Sentential Subject

SD: cheleTa, Je porikkhate bhalo korbe, se amar
 boy-the who exam-in well do-will he my
 bondhu
 friend

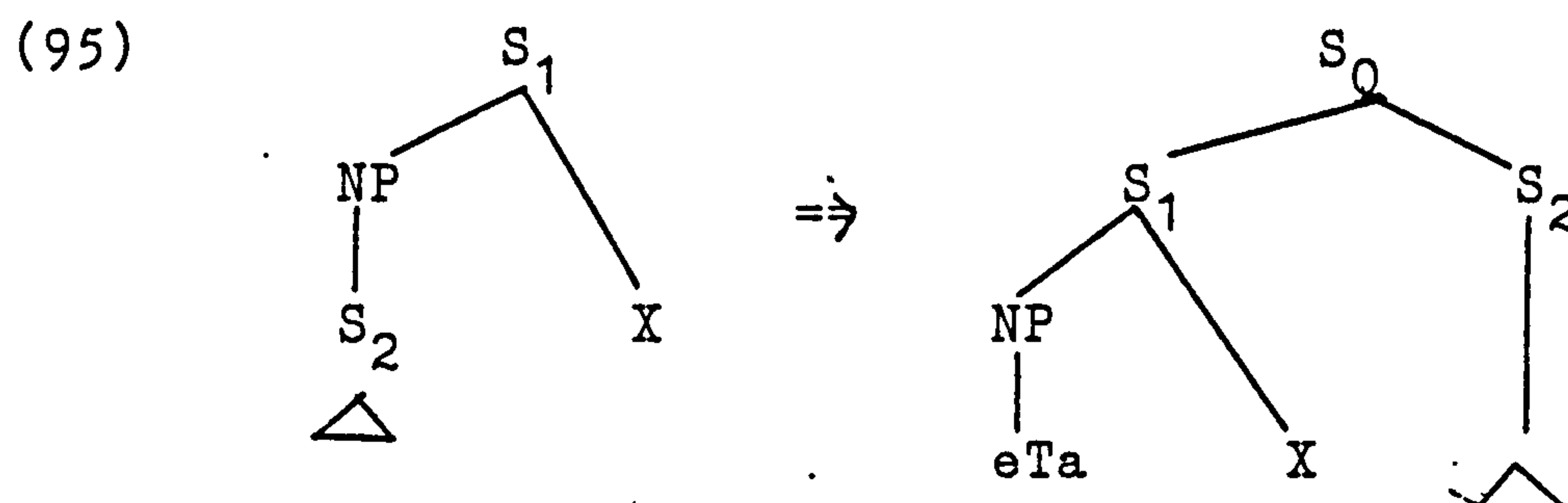
'The boy, who will do well in his examination, is
 my friend'

SC: eTa + amar bondhu cheleTa, Je porikkhate bhalo
 it my friend boy-the who exam-in well
 korbe
 do-will

1 2 ⇒ eTa + 2 1

6.4.7 Extraposition Rules

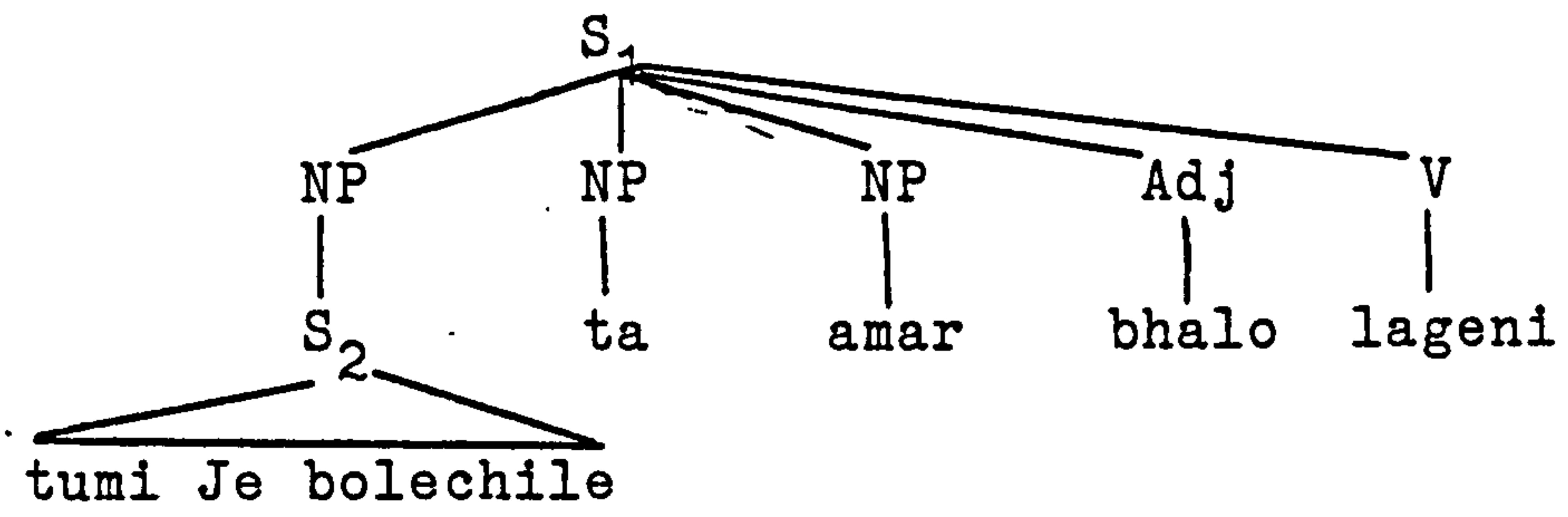
The examples which have been given so far illustrate clearly the role of extraposition. To make this more explicit, it can be said that extraposition is a simple movement rule where the clause occurs initially in the subject position of the sentence from where it is detached and re-attached at the end of the sentence. Due to this movement of the clause a new node is created. The rule is stated below, following Keyser and Postal (1976: 233) with a simple modification.



The following example will show the operation of the phrase structure rule.

- (96) a. tumi Je bolechile aJ skule Jabe na,
 you that said today school-to go-will not
 ta amar bhalo lageni
 that my good feel-not
 'I did not feel it good what you said that you
 won't be going to school today'

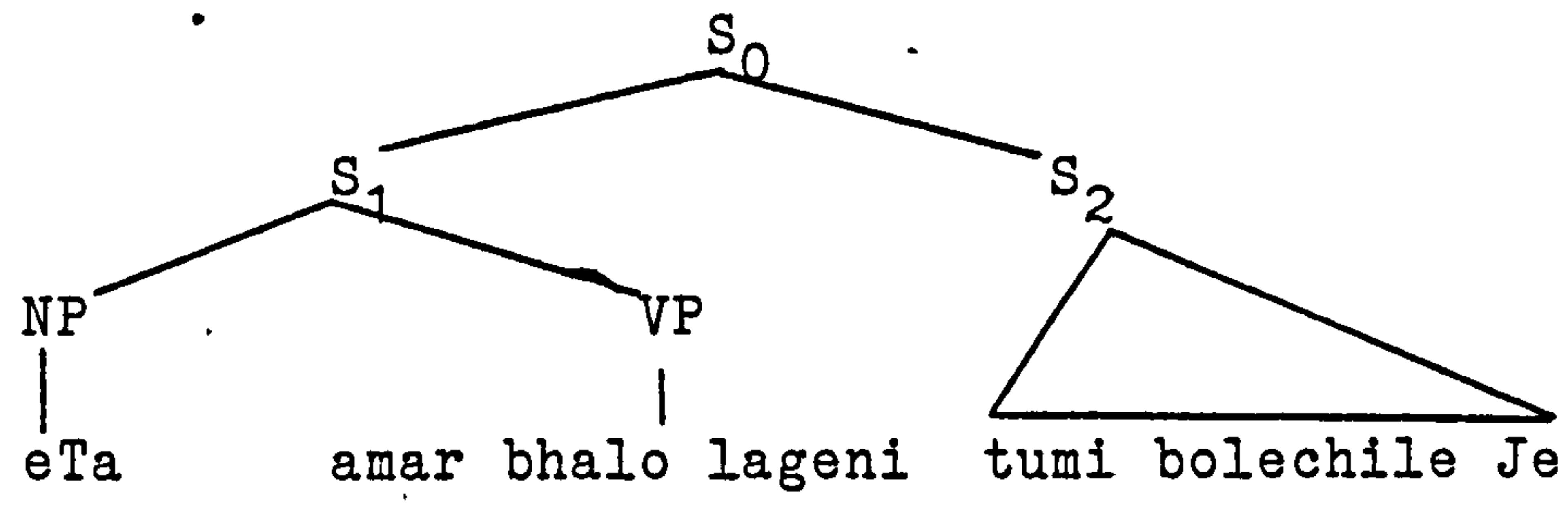
b.



aJ skule Jabe na

'You said that you that my good feel not'
won't be going to
school today

c.



eTa amar bhalo lageni tumi bolechile Je
aJ skule Jabe na

'it I did not feel good you said that you
won't be going to
school today'

The initial string of a complex sentence in Bengali can contain any grammatical categories like the noun, verb, adjective and adverb and they can be moved to the final string of a sentence after applying extraposition. The occurrence of noun, adjective and adverb in the initial string indicates that the clause can be constructed with these grammatical categories as constituents can be moved to the place of the matrix sentence after pushing the matrix sentence forward to the place of the clause. The

occurrence of different grammatical categories in the clause is shown in the following examples.

(97) a. tumi Je Thik ete kono sɔndeho nei
 you that right that-in any doubt not
 'There is no doubt that you are right'

á. ete kono sɔndeho nei Je tumi Thik
 that-in any doubt not that you right
 'There is no doubt that you are right'

b. tar bæ bohar khub marJito nɔe ta
 his behaviour very sophisticated not that
 dukkhoJɔnok
 sad
 'It is sad that his behaviour is not very
 sophisticated'

ḃ. eTa dukkhoJɔnok Je tar bæ bohar khub marJito
 it sad that his behaviour very sophisti-
 nɔe
 cated not
 'It is sad that his behaviour is not very
 sophisticated'

c. tader barite kɔkhon mita esechilo ta amar
 their house-to when Mita came that mine
 mone nei
 mind-in not

'I cannot remember when Mita went to their house'

ć. eTa amar mone nei tader barite kəkhon mita
it mine mind-in not their house-to when Mita
esechilo

came

'It I cannot remember when Mita went to their
house' (lit)

d. bondhur dəl Je sukher paera ta səbai
friends group that happiness pigeon that all
Jane

know

'All know that friends are the pigeons of happi-
ness'

đ. eTa səbai Jane Je bondhur dəl sukher
it all know that friends group happiness
paera
pigeon

'It is known to all that friends are the pigeons
of happiness'

eTa-insertion is shown in all the examples except for (97á),
where the second sentence has moved initially after shifting
the first sentence in its place.

6.4.8 Condition on Extraposition

Extraposition is possible only when a relative clause is embedded in initial or medial positions, but never in final position. When the relative clause is embedded in final position, if it is moved from its position it would not be a case of extraposition, as extraposition rule moves constituent or clause either from the initial or medial positions to the final position in the sentence. This shows that extraposition is a right-movement rule in Bengali. The following example shows the shifting of the antecedent of the relative clause in an instance where the relative clause occurs after the antecedent.

- (98) a. bhaddrolok, Jini namkora sahittik, tini boi
 gentleman who famous writer he book
 porchen
 reading
 'The gentleman, who is a famous writer, is
 reading a book'
- b. tini namkora sahittik Jini boi porchen sei
 he famous writer who book reading that
 bhaddrolok
 gentleman
 'He is a famous writer, who is reading a book,
 that gentleman' (lit)
 ['He is a famous writer the gentleman, who is
 reading a book']

Instead of moving the whole relative clause, the antecedent of the relative clause (bhəddrolək 'gentleman') is moved to the end of the sentence after applying extraposition.

Extraposition shows that when embedded sentences are generated they move out from their NP position. When they move out they are detached from the head noun and after eTa 'it' insertion, eTa takes the underlying position of the head noun. Thus a sentence may contain two subjects if eTa is inserted in the sentence, in that sense the embedded sentence which moved rightward of the sentence may be called Postponed Subject (Quirk et al, 1979: 963).

6.5 Intraposition

Emonds (1979) has proposed an alternative approach to extraposition, which he describes as the 'Intraposition'. The following examples show the derivation of extraposition and intraposition.

- (99) a. dupure surJer tap Je bhɔabɔho ta Thik
 noon-at sun-of heat that awful that true
 'It is true that the heat of sun at noon is
 awful'
- b. eTa Thik Je dupure surJer tap bhɔabɔho
 it true that noon-at sun-of heat awful
 'It is true that heat of sun at noon is awful'
- c. dupure surJer tap Je bhɔabɔho eTa Thik
 noon-at sun-of heat that awful it true
 'It is true that the heat of sun at noon is
 awful'

The examples which are given above show the neutral sentence in (99a), extraposition in (99b) and intraposition in (99c). The extraposed sentence is derived from (99c), the intraposed structure (99c) is derived from (99b). In this sense, their structure is mutually exclusive as they derive from each other's structure. An intraposition derives from the extraposed structure. The rule which is applicable to the transformation may be stated as the following. It should be mentioned here that the position

of the complementizer Je 'that' shows its movement for extraposition and intraposition structure which can be seen in (99b) and (99c).

(100) Intraposition Rule

SD:	[eTa	Thik]	[Je]	[dupure	surJer	tap]	[bhoabho]
	1	2		3		4	
	it	true	that	noon-at	sun-of	heat	awful
SC:	3	2	4	1			

(100) shows that the basic difference between the two structures is that the initial part of the extraposed sentence is moved to the end of the sentence due to the intraposition rule, and the other constituents moved forward without changing their positions. In this respect, they are opposite to each other. They both have the same underlying structure which can be seen from the examples (99b, c) given previously.

The intraposition analysis is still immature in the sense that it has not yet been developed by others. We have therefore not tried to make an exhaustive analysis of the rule here.

CHAPTER SEVEN

Focus and Clefting

7.0 Introductory

In the following section a brief study is made of focus, cleft and pseudo-cleft constructions. When focus is assigned on the main constituents in relative clause and in matrix sentence, the emphasis of the clause or the sentence is shifted and gives new information in a clause or in a sentence. Presupposition is also included with focus, as the former deals with the meaning of the sentence. However, more emphasis is given on focus than presupposition.

Cleft and pseudo-cleft constructions play important roles in focusing different constituents in a sentence and they are described after focus. The extraposition of relative clauses in cleft and pseudo-cleft sentences in Bengali is described with various kinds of clefting. When a Bengali sentence becomes involved in clefting, it shows different structure than English, the difference of which is also described in the following section. The Bengali relative clauses show difficulties in inserting eTa 'it' as the subject in a cleft sentence, as the honorific nouns do not allow eTa as the subject of a cleft sentence like the following: it is my father, it was my teacher, it is Professor Hume. All these features are shown in the following section with rules and explanatory examples.

7.1 Focus

7.1.1 Focus and Presupposition

In recent studies in Linguistics, Focus and Presupposition have received emphasis in the analysis of relative clauses. Presupposition is more or less a philosophical concept which has been applied in Linguistics by many linguists regarding the concept of meaning in a sentence. Focus, which is also applied for new information in a sentence, is directly involved in meaning. As both focus and presupposition deal directly with the scope of meaning in a sentence, they have equal importance in semantics and syntax. Our main intention is to discuss focus and to show its importance in directing the meaning of a sentence. More priority is given to focus than to presupposition, and the latter will be included only when it becomes relevant to the analysis of focus.

Focus and presupposition are not identical in their status. When focus is assigned to any sentence, it gives it new information, whereas, presupposition can be taken as information which establishes assumptions which underlie an utterance in contrast to focus. When presupposition is applied to a sentence, it affects its meaning. So, it may be said that a sentence contains a two-fold meaning, if it is analysed from the standpoint of focus and presupposition. Presupposition provides the meaning already assumed and focus gives the new information of

meaning. Halliday (1967, 1968), Schachter (1973), Lyons (1979) and Akmajian (1979) have made an explicit distinction between focus and presupposition both from philosophical and linguistic standpoints which are very useful in making distinctions between them. The following example can be given to show the distinction between focus and presupposition and the way they are used in a sentence to convey meaning.

(1) kɔki?

k what

'What is a k?'

Sentence (1) illustrates that a speaker and a hearer assume that kɔ is an object, which may be something like a book, a picture, a sari, etc. So the presupposition is present in the sentence. Alternatively, if focus is assigned to the above sentence, then the identity of kɔ will be as the following:

(2) kɔ hochche æ kTa gɔlper bɔi

k is a story-of book

'K is a story book'

The focus is assigned to gɔlper bɔi 'story book' in (2) after giving the main stress to it. The new information which is assigned by gɔlper bɔi can be interpreted only in this way: 'What is K?', but not as 'What is a story book?' The following examples are given where a sentence contains both focus and presupposition.

(3) a. boiTa Je Tèbiler opore chilo, ta amar Jana
 book-the that table's on was that my know
 chilo na

was not

'I did not know that the book was on the table'

b. mœenar abba, Jini Dàktar, tini amader barite
 Moina's father who doctor he our house-to
 rugi dekhte esechilen

patient see-to came

'Moina's father, who is a physician, came to our
 house to examine a patient'

It can be noticed the way focus and presupposition have been included in both sentences in (3). One can presuppose (3a) in the way that it is already known that the book was somewhere, and after the inclusion of focus it gives the new information that the book was on the table. In (3b), one presupposes that who came to our house was the father of Moina, and the new information has been provided by focus that 'he is a physician'. So that focus gives the answer to the underlying question: Who is the father of Moina? and the answer is 'He is a physician'. So, it is clear that focus plays a distinctive role in relative clauses where it assigns new information. Even focus can be transferred from one constituent to another constituent, where the new information is easily transferable. This may be shown in the following examples.

- (4) a. lokTa Je gɔlpo likheche, ta bès bhalo
 man-the which story written-has that quite good
 'That the story the man has written is quite good'
- b. lokTa Je gɔlpo likheche, ta bes bhalo
 man-the which story written-has that quite good
 'That the story the man has written is quite good'
- c. lokTa Je gɔlpo likheche, ta bes bhalo
 man-the which story written-has that quite good
 'That the story the man has written is quite good'
- (5) a. məna mouke Je phrɔkTa diechilo, ta ɔpurbo
 Moina Mou-to which frock gave that excellent
 'The frock that Moina gave to Mou was excellent'
- b. məna mouke Je phrɔkTa diechilo, ta ɔpurbo
 'The frock that Moina gave to Mou was excellent'
- c. məna mouke Je phrɔkTa diechilo, ta ɔpurbo
 frock-the
 'The frock that Moina gave to Mou was excellent'
- d. məna mouke Je phrɔkTa diechilo, ta ɔpurbo
 excellent
 'The frock that Moina gave to Mou was excellent'

(4a) illustrates that after focusing on the constituent bes 'quite', the meaning of the sentence becomes that the story that was written by the man was not bad. After focusing on verb likheche 'has written' in (4b), the meaning of the sentence becomes different from (4a). (4b) illustrates that

the man wrote a story, and did not read it. After focusing on galpo 'story', (4c) shows its difference from (4a) and (4b) in its meaning. The meaning of (4c) is that the man wrote a story, not a poem. Like (4), sentences which are shown in (5) also illustrate that transferring of focus from one constituent to another constituent interchanges the meaning of the sentence which may be assigned in the following manner:

- (5) a. Focus is on Mòina: the person who gave an excellent frock to Mou, that was Mòina.
- b. Focus is on Mòu: Moina gave an excellent frock to a girl, she was Mòu.
- c. Focus is on fròck: Moina gave something to Mou, that was a fròck.
- d. Focus is on ɔ̌purbo 'excellent': Moina gave a frock to Mou, that was ɔ̌purbo.

However, (5c) and (5d) can be conjoined together and the meaning of the utterance will be: Moina gave something to Mou, that was an ɔ̌purbo phrək 'an excellent frock'. To distinguish the way focus is assigned to a sentence constituent, an intonation contour (/ sign) is used at the appropriate point in the utterance of a sentence.

'Mou is reading a book written by Jasimuddin'

- b. mou æ kTa bòi, Ja porche, ta hochche Josimud
Mou a book which reading that is Jasimud-
diner lekha
din-of written

'Mou is reading a book which is written by
Jasimuddin'

- (8) a. mæna Josimuddiner lekha polligiti sunte
Moina Jasimuddin-of written folk-song listen-to
bhalobase
likes

'Moina likes to listen to the folk songs written
by Jasimuddin'

- b. mæna pòlligiti, Ja sunte bhalobase, ta
Moina folk-song which listen-to likes that
hochche Josimuddiner lekha
is Jasimuddin-of written

'Moina likes to hear the folk songs which are
written by Jasimuddin'

['Folk songs which Moina likes to hear are those
written by Jasimuddin']

- b. mæna pòlligiti, Ja Josimuddiner lekha, ta
Moina folk-song which Jasimuddin-of written that
sunte bhalobase
listen-to likes

'Moina likes to hear folk songs which are written
by Jasimuddin'

In the above examples, (7a) and (8a) are composed without any relative clauses. The relative clauses are constituted in (7b) and (8b). No constituent is focused in (7a) and (8a), whereas, boi 'book' and polligiti 'folk song' are focused in (7b) and (8b), which are incidentally the antecedents of the relative clauses. Both (a) and (b) sentences in (7) and (8) are related in their deep structures as both of them contain identical NPs in simple sentences which are shown in (7) and (8). A similar type of example can also be given with simple sentences and sentences with free relative clauses after assigning focus on the last constituents in the latter types of sentences. These types of sentence are compared in (9-11).

(9) a. mou boi porte pəchondo kəre

Mou book read-to like does

'Mou likes to read books'

b. mou Ja pəchondo kəre, ta hochche bòì pəra

Mou what like does that is book reading

'What Mou likes is reading books'

(10) a. məna gan sunte bhalobase

Moina song listening likes

'Moina likes listening to songs'

b. məna Ja bhalobase, ta hochche gàn sona

Moina what likes that is song listening

'What Moina likes is listening to a song'

- (11) a. mouke mœna bhalobase
 Mou-to Moina likes
 'Moina likes Mou'
- b. mouke Je bhalobase, se hochche mœna
 Mou-to who likes she is Moina
 'Who likes Mou is Moina'

In the above examples (9-11), the (a) sentences are simple sentences, and the (b) sentences are complex sentences which in turn constitute the headless relative clauses. No focus is assigned in the (a) sentences, whereas, the focus is assigned on the last constituents in the (b) sentences. One point should be clarified here, namely that the examples which are given in the (b) sentences are all of pseudo-cleft sentences. The (b) sentences are taken as pseudo-cleft sentences as the one sentence (a sentence) has been divided into two sections and two sections can be analysed as a main clause and a subordinate clause (b sentence) where both sections show their own verbs. The reason for considering (b) sentences as pseudo-cleft sentences is that when focus is assigned in a pseudo-cleft sentence, it includes the cleft phrase. According to the formulation of focusing rule, if focus is assigned in the higher clause, presupposition is always assigned to the lower clause. We can even constitute a cleft sentence in the same way the pseudo-clefts are formed in Bengali, which are shown already in (9-11). For convenience, the same simple sentences can be repeated for the construction of cleft and pseudo-cleft.

- (12) a. mou boi porte pəchondo kəre
 Mou book read-to like does
 'Mou likes to read books'
- b. eTa (hochche) boi pəra, Ja mou pəchondo kəre
 it is book reading that Mou like does
 'It is book reading that Mou likes'
- (13) a. mou boi porte pəchondo kəre
 'Mou likes to read books'
- b. mou Ja pəchondo kəre, ta hochche boi pəra
 mou what like does that is book reading
 'What Mou likes is reading of books'

(12b) is an example of cleft, and (13b) a pseudo-cleft. The only significant difference of focusing on cleft and pseudo-cleft sentences is that focus is assigned on the lower clause in cleft and on the higher clause in pseudo-cleft.

7.1.3 Focus in Cleft and Pseudo-cleft sentences

Lakoff (1965) and Ross(1971) have also discussed focus and presupposition in relation to cleft sentences. The (a) sentence in the following example can be converted into (b) sentence after applying focus. The interesting point is that after exchanging focus from one constituent to another, and even changing place of the constituents, both the sentences remain valid as cleft sentences. The only reason to make such a statement is that (14a) and

(14b) are not directly related by T-rule.

- (14) a. eTa mou, Je boi kinechilo
 it Mou who book bought
 'It was Mou who bought a book'
- b. eTa boi, Ja mou kinechilo
 it book which Mou bought
 'It was a book that Mou bought'

Focus can be assigned to any major constituents of a sentence. A few examples are given here to show the way focus is assigned in Bengali.

7.1.3.1 Focus in Affirmative and Negative Sentences

- (15) a. eTa mou, Je aJ Ja korche, ta hochche
 it Mou what today what doing that is
 klaser p̥rasuna
 class-of study
 'It is Mou who is doing (something) today,
 (namely), study for her class'
 ['It is Mou who is studying for her class today']
- b. eTa mou Je aJ klaser p̥rasuna, ta k̥re ni
 it Mou who today class-of study that did not
 'It is Mou who today studying for her class did
 not do?
 ['It is the studying for her class that Mou did
 not do today?']

There is no restriction on the assignment of focus either in affirmative or negative sentences as shown in (15), where mou 'Mou' (15a) and parasuna 'study' (15b) got the focus. Changing of focus on different constituents in a negative sentence is possible as shown in (16). Examples which are given previously in (4) are all affirmative sentences (to show focus on different constituents in a sentence); they are repeated here after focus has been assigned negatively.

- (16) a. lokTa Je golpo likheche, ta bèsi bhalo nœ
 man-the which story written that very good not
 'The story that the man has written is not very
 good'
- b. lokTa Je golpo likheche, ta besi bhalo nœ
 'The story that the man has written is not very
 good'

After assigning focus on negative sentences, the earlier statement on the meaning of the constituents in a sentence could not hold, due to the presence of a negative constituent in the sentences, which blocks incoming new information.

7.1.3.2 Focus on Subject and Object

Focus may be assigned to subject, object, or any part of the sentence which is relevant for giving new information. The following examples are given to show the assigning of focus on subject (17a) and object (17b):

- (17) a. eTa bòi, Ja mou kinechilo
 it book which Mou bought
 'It is a book that Mou bought'
- b. eTa mòi, Je boi kinechilo
 it Mou who book bought
 'It was Mou who bought a book'

In (17a), focus is assigned on object (boi 'book'), and in (17b) on subject (mou 'Mou'). These sentences relate to a neutral sentence like the following:

- (17) c. mou æ kTa boi kinechilo
 Mou a book bought
 'Mou bought a book'

Comparable to the above examples of cleft sentences, there are pseudo-cleft sentences. This may be shown in the following examples:

- (18) a. mou Ja kinechilo, ta hochche bòi
 Mou what bought that is book
 'What Mou bought was a book'
- b. boi Je kinechilo, se hochche mòi
 book who bought she is Mou
 'Who bought a book was Mou'

The only difference between cleft and pseudo-cleft sentences is that after focusing the constituent, the relative clause is pushed forward for the clefts and pushed backward for

the pseudo-clefts. If negation is applied, it works perfectly both in cleft and pseudo-cleft sentences. Compare the following sentences:

- (19) a. eTa bòi, Ja mou keneni (Cleft)
 it book that Mou bought-not
 'It is a book that Mou did not buy'
- b. mou Ja keneni, ta hochche bòi (Pseudo-cleft)
 Mou what bought-not that is book
 'What Mou did not buy was a book'

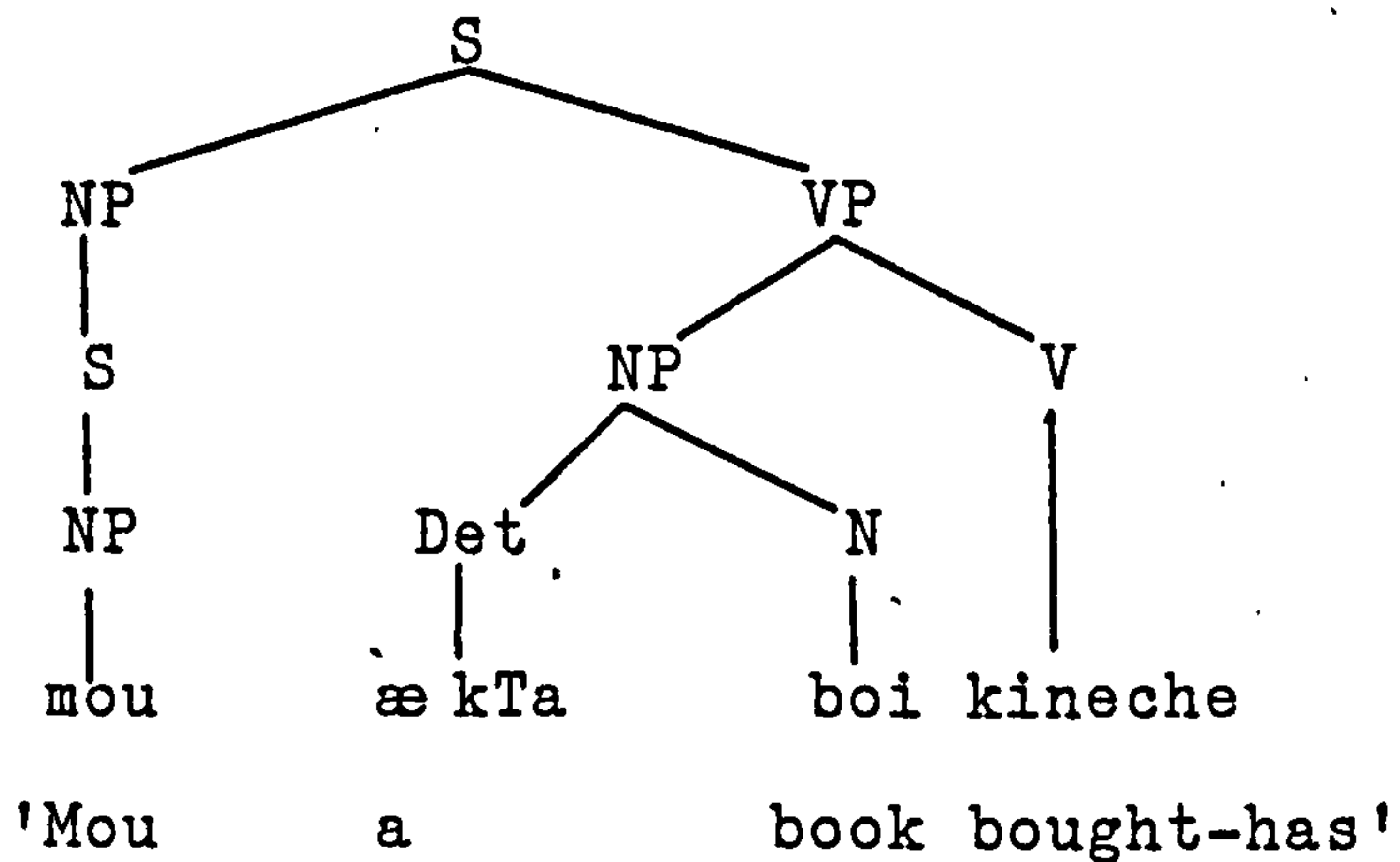
Focus is assigned on the object in cleft (19a) and pseudo-cleft in (19b). The same way focus can be assigned on the subject, as shown in (20).

- (20) a. eTa mòi, Je boi keneni (Cleft)
 it Mou who book bought-not
 'It was Mou who did not buy books'
- b. Je boi keneni se hochche mòi (Pseudo-cleft)
 who book bought-not is Mou
 'Who did not buy books was Mou'

mou occurs as the subject in (20a) and (20b) which in turn got focus.

The underlying structure of the above sentences can be shown in the following way:

(21)



Quirk et al (1979: 939) have shown various ways of assigning focus in a sentence. The following examples are given here from Bengali after following their focusing rules.

(22) a. Focus at S:

mòu name je meeTa, se Dhakae thake
 Mou name who girl-the she Dacca-in lives
 'The girl whose name is Mou lives in Dacca'

b. Focus at V:

mou name Je meeTa, se Dhakae thàke
 lives
 'The girl whose name is Mou lives in Dacca'

c. Focus at O_D :

mou name Je meeTa, se bòie mplaT dichche
 Mou name who girl-the she book-of cover giving
 'The girl whose name is Mou is putting a cover on
 the book'

d. Focus at Adv:

mou name Je meeTa se prài tibhi dæ khe
 Mou name who girl-the she often T.V. watches
 'The girl whose name is Mou often watches
 television'

Focusing on verbs (22b) and adverbs (22d) may be explained as they have interesting features, especially when the verb is focused in a sentence. A few adverbs are chosen here to show the focusing rule. These are sudhu 'only', Thik/prae 'just', and aro 'too'.

- (23) a. ami Je meeTake sudhu boi diechilam, se
 I who girl-the only book gave she
 hochche moutusi
 is Moutusi
 'The girl whom I gave only the book is Moutusi'
- b. ami tomake Je khàli bokechilam, tar Jonne
 I you-to that just rebuked that for
 dukkhito
 sorry
 'I am sorry that I ~~was~~ rebuked you for nothing
- c. amake sudhu Je mainer Takae colte hæ
 me only that salary-of money-of maintain
 ta næe, takeo sahaJJo korte hæ
 that not him-also help can-to have
 'I have not only to maintain myself on salary but
 also to help him'

- d. tumi amake je Thik ki dite cao ta bolo
 you me that exactly what give-to want that say
 'Tell me what exactly you want to give me'
- e. tar bon-ò Je necechilo, ta ami Jantam
 his sister-also that danced that I knew
 na
 not
 'I did not know that his sister also danced'

The above examples show the focusing on different types of adverbs.

It is clear from the above discussion that focusing can be made on different constituents of a sentence. Focusing on nouns, adverbs and verbs are shown in a relative clause and in a simple sentence. Besides the relative clause and simple sentence, clefts and pseudo-clefts are also included in the discussion to show focusing in such types of sentences. A general discussion on cleft and pseudo-cleft sentences is made in the following section.

7.2 Cleft Sentence

7.2.1 Clefting Rule

Cleft and pseudo-cleft sentences are important in the present study as they play important roles in focusing different constituents in a sentence and extraposing the relative clauses. The focusing role of cleft and pseudo-cleft sentences has been shown schematically in the previous section (7.1.3) in this discussion, so that we can elaborate the structural patterns of clefts and pseudo-clefts, along with their syntactic and transformational behaviour.

Cleft sentences are formed in English when a clause is divided into two parts, each part containing its own verb. Cleft sentences are formed in the same way in Bengali. The only difference is that the verb may remain absent either in the first or in the second clause or sentence. The reason is that occasionally a copular verb in present tense (cf. 1.2.5.3) in a clause or in a sentence in Bengali remains absent as shown in (24).

- (24) eTa (hochche) æ kTa lal boi, Ja mœna upohar
 it is a red book which Moina present
 peechilo
 got

'It (is) a red book which Moina got as a present'

The verb hochche 'is' may remain absent in the sentence without affecting structure and the meaning of the sentence.

Note that in such cleft sentences, the second clause has the form of a relative clause.

The sequence of word orders in a cleft sentence is something like this (Quirk et al, 1979: 951): it begins with eTa 'it', then it is followed by a verb, and focus falls on the next element. Though word order could be different in a cleft sentence and focusing items are capable of interchanging their positions in a sentence. Quirk et al (1979: 951) have shown the way an item changes its place and gets focusing. The following examples are based on their presentation.

- (25) tini hochchen baṅali kōbi robindronath, Jini tār
 he is Bengali poet Rabindranath who his
 sresThogrontho gitanJolir Jonne bohu bāchor age nobel
 best book Gitanjali's for many years ago Nobel
 puroskar peechilen
 Prize received
 'It was the Bengali poet Rabindranath who received the
 Nobel Prize many years ago for his famous book
 Gitanjali'

It is possible to derive various cleft sentences from any neutral sentence (non-cleft sentence) like (25), where the clause patterns change with the sentence patterns, and vice versa. Examples:

(26) a. S as Focus

eTa hochche amar bandhobi sèlina, Je tar sresTho
 it is my friend Selina who her best
 upponaser Jonne puroskar peechilo
 novel for prize received
 'It was my friend Selina, who received the prize
 for her best novel'

b. O_d as Focus

eTa chilo robindronather sresTho grontho
 it was Rabindranath's best book
gitanJoli, Ja ami porechi
 Gitanjali which I read-have
 'It was Rabindranath's best book Gitanjali, which
 I have read'.

c. A time as Focus

eTa bòhu bôchor age Jekhon banali kobi
 it many years before when Bengali poet
 robindronath tār sresTho grontho gitanJolir Jonne
 Rabindranath his best book Gitanjali's for
 nobel puroskar peechilen
 Nobel Prize received
 'It was long time ago when the Bengali poet
 Rabindranath received the Nobel Prize for his
 best book Gitanjali'

eTa 'it' cannot precede NPs in which the head noun is
 honorific. Being inanimate, it occurs before nonhuman

nouns: cf. (26b) and (26c). However, pronouns (honorific) can be preceded by eTa 'it' if the pronoun is followed by a NP denoting any inanimate object, as shown in (26b). The occurrence of eTa and restrictions of its occurrence are shown in the following examples.

(27) a. eTa æ kTa goru

it . a cow

'It is a cow'

b. eTa æ kJon manus

it a man

'It is a man'

c. eTa æ kTa Tebil

it a table

'It is a table'

(28) a. eTa robindronather chobi

it Rabindranath's photograph

'It is a photograph of Rabindranath'

b. eTa robindronather upponnas

it Rabindranath's novel

'It is Rabindranath's novel'

(29) a. *eTa robindronather baba
ini

it-he Rabindranath's father

'It (he) is Rabindranath's father'

b. eTa amar bhai

it my brother

'It is my brother'

- c. *eTa amar sikkhok
 ini
 it/he my teacher

'It (he) is my teacher'

- (30) a. eTa ki? eTa hochche æ kTa boi
 it what it is a book
 'What is it?' 'It is a book'

- b. e ke? e hochche æ kJon manus
 he who? he is a man
 'What is he?' 'He is a man'

- c. eTa æ kTa chobi
 it a picture
 'It is a picture'

- d. eTa æ kJon manus
 it a man
 'It is a man'

The way eTa occurs as a subject in Bengali sentences has been illustrated in the above examples. The most common ways of using eTa are shown in question and answer forms along with some other examples in (30). (30a) and (30b) indicate that in the case of an animate and human items, the question has the form e ke 'who is he/she?' and the answer becomes e mou 'she is Mou', o mou 'she is Mou', se mee 'she is a girl', etc. In case of an inanimate or animate item without any human binding, the question has

the form eTa ki 'what is it?', and the answer becomes eTa boi 'it is a book', oTa putul 'that is a doll', oTa guru 'that is a cow', etc. (28a) and (29a) are given to show the appropriate use of eTa. (28a) indicates that eTa is used correctly as it occurs in a construction with the 'photograph of Rabindranath'. Whereas, (29a) is incorrect as eTa occurs in a construction with 'the father of Rabindranath', which is honorific and human. (30c) and (30d) show the proper way of using eTa. In (30d), eTa occurs before an animate and human noun, but the occurrence of eTa can be taken appropriate as a human quantifier is used before manus 'man' and after eTa, which is not used for the non-human noun in (30c). Though in the colloquial pattern of Bengali occasionally the speakers do not obey the rules of eTa insertion and use it before human nouns, except for famous persons like *eTa (ini) robindronath 'it (he) is Rabindranath', but eTa mee 'it is a girl', eTa bhai 'it is my brother', eTa mou 'it is Mou', etc. The exception of using eTa is shown in (29a) and (29b) where it is not allowed as a subject of human nouns which are used honorifically. It is quite clear from these examples that eTa has selectional restrictions on its occurrence as a subject. In general, eTa occurs for both inanimate and animate nouns, but it may also occur for human nouns with the exception of human nouns which have honorific features. For this reason it does not occur as the subject of any common honorific nouns like sikkhok 'teacher', as shown in

(29c). eTa may be replaced in ^{the}case of honorific use of any human nouns by ini 'he-hon'. In ^{the}case of non-honorific human nouns which do not allow eTa insertion, e 'he/she' must be used in place of it.

7.2.2 Focus in Cleft Sentences

It is quite clear from the above examples that cleft sentence may be taken as a focusing device and focusing on particular items or constituents yields new meaning in it. Examples:

- (31) a. amader sikkhok hai saheb Jini budhbare mouke
 our teacher Hai saheb who wednesday-on Mou-to
 æ kTa boi diechilen, tini dersoner oddhapok
 a book gave he philosophy-in teacher
 'Our teacher Mr Hai who gave a book to Mou on
 Wednesday who is a teacher in philosophy'
- b. *eTa hochchen amader sikkhok hai saheb, Jini mouke
ini
 it is our teacher Hai saheb who Mou-to
 budhbare æ kTa boi diechilen, tini
 wednesday-on a book gave he
 dersoner oddhapok
 philosophy-in teacher
 'It is our teacher Mr Hai, who gave a book to Mou
 on Wednesday, (who) is a teacher in philosophy'
- c. eTa hochche mou, Jake amader sikkhok hai saheb
e
 it is Mou whom our teacher Hai saheb

budhbare æ kTa boi diechilen, se dərsoner
 Wednesday-on a book gave whe philosophy-in
 chattri
 student

'It was Mou, who is a student in Philosophy to
 whom Mr Hai gave a book on Wednesday'

- d. eTa hochche æ kTa bòi, Ja amader sikkhək hai
 it is a book what our teacher Hai
 saheb mouke budhbare diechilen, ta tãri
 saheb Mou-to wednesday-on gave that his-emp
 lekha
 written

'It was a book that our teacher Mr Hai gave to
 Mou on Wednesday, which is written by him'

- e. eTa chilo bùdhbar, Jakhon amader sikkhək hai saheb
 it was wednesday when our teacher Hai saheb
 mouke æ kTa boi diechilen
 Mou-to a book gave

'It was Wednesday when our teacher Mr Hai gave a
 book to Mou'

- f. amader sikkhək hai saheb budhbare mouke Ja
 our teacher Hai saheb wednesday-on Mou-to what
 diechilen, ta hochche æ kTa gəlper boi
 gave that is a story-of book
 'What our teacher Mr Hai gave to Mou on Wednesday
 was a story book'

Sentences which are illustrated in (31) show variable patterns of focusing constituents at the beginning of the first clause after eTa 'it' and clefting sentences. Focusing and clefting are shown simultaneously in (31) which has made considerable change in the structure of sentences in (31b-f). The most interesting change can be seen in (31b-e) where a constituent of the original sentence (31a) has been moved to the initial position in each sentence after eTa for focusing and the structure of the matrix sentence has been altered due to the relative pronoun and the antecedent of the relative clause. hai saheb 'Mr Hai' is the antecedent of the relative clause in (31b), so the matrix-sentence retains the order of (31). mou becomes the antecedent in (31c), so the structure of the matrix sentence has changed as the coreferential pronoun shows its relationship against mou 'Mou', and not against hai saheb 'Mr Hai' as shown in (31b), boi 'book' is the antecedent of the relative clause in (31d), so the inanimate correlative occurs in its place to match against the inanimate relative pronoun. budhbar 'Wednesday' occurs as the antecedent in (31e) and eTa as the subject of the clause. Jakhon 'when' occurs as a pronoun in place of a regular pronoun as it occurs as a time-clause. Ja 'what' and ta 'that' occur as relative and correlative marker in (31f), which shows a different structure than (31b-e).

(31a) is a neutral sentence, which is shown with a relative clause in it and without focusing any constituents.

(31f) is constituted with a wh-phrase, which occurs initially in the sentence. Focus is assigned on the constituents which are preceded by eTa in (31b-e), except in (31f), which is not a cleft sentence. Focus is assigned at the end of the sentence in (31f) on gɔlper boi 'story book'. One major difference between the clefted and non-clefted sentences with relative clauses can be seen in (31). (31a) occurs as a non-cleft sentence with a relative clause. The cleft sentences which are shown in (31b-e), show different constructions in their matrix sentences, which are mentioned in the previous section. The way eTa 'it' or ini 'he/she' (in case of honorific use with human nouns) occurs as a coreferential element in (31b-f) can be explained in the following way: ini-Jini 'he-who' (31b), se-Jake 'she-whom' (31c), eTa-Ja 'it-that' (31d), eTa-Jɔkhon 'it-when' (31e) and Ja-ta 'what-that' (31f). So, the cleft sentences seem perfect with the relative clauses, as they contain co-referential elements. This structure is usually maintained strictly as normally no relative clause can occur without any coreferential element.

7.2.3 Relative Clauses in Cleft Sentences

One interesting point can be noticed when relative clauses are introduced in the cleft sentences. In (32), the relative clause occurs after the matrix sentence. That is to say that when eTa occurs as the subject in a

cleft sentence, the matrix sentence always precedes the relative clause.

- (32) a. eTa hochche æ kTa boi
 it is a book
 'It is a book'
- b. amader sikkhək hai saheb budhbare mouke æ kTa
 our teacher Hai saheb wednesday-on Mou-to a
 boi diechilen
 book gave
 'Our teacher Mr Hai gave a book to Mou on
 Wednesday'
- c. eTa hochche æ kTa boi, Ja amader sikkhək hai
 it is a book what our teacher Hai
 saheb budhbare mouke diechilen
 saheb wednesday-on Mou-to gave
 'It was a book which our teacher Mr Hai gave to
 Mou on Wednesday'

The common structure of a cleft sentence in Bengali is that the pronoun and the relative clause can easily be fronted, as an initial relative clause in a sentence is more common than one in medial or sentence final position. Three different distributions of relative clauses are shown in the following examples.

(33) Relative Clause used initially in a Cleft Sentence:

eTa Je gacher pata, ta amader barite ache
 it which tree-of leaf that our house-in has
 'It is in our house the tree which the leaf belongs
 to' (lit)

(34) Relative Clause used medially in a Cleft Sentence:

eTa hochche maena Jar cokh horiner moto, se
 it is Moina whose eyes deer's like she
 bhasatotter chattri
 Linguistics-of student
 'It is Moina whose eyes are like those of a deer (who)
 is a student of Linguistics'

(35) Relative Clause used finally in a Cleft Sentence:

eTa hai saheb agei bolechilen, Jini amader
 it Hai saheb before said who our
 bhasatotter oddhapok
 Linguistics-in teacher
 'It was told before by Mr Hai, who is our Linguistics
 teacher'

The structural pattern of cleft sentences suggests that eTa should be introduced at the beginning of a sentence and ho- 'be' verbal form before a noun phrase. It has already been said that the occurrence of 'be' verb in present tense is not regular in Bengali, so that it has an optional occurrence in a noun phrase. However, there is a restriction on

the occurrence of the constituents which has been suggested above is that eTa does not occur completely freely, and this casts doubt on the T-rule.

7.2.4 Clefting of Relative Constructions

The preceding discussion of clefting has made the point (see 7.2.1) that the process of clefting involves the introduction of a relative clause. Examples given in earlier section will make it apparent that clefting can be applied not only to simple sentences, but also to complex sentences incorporating a relative clause. The nature of the transformations involved in such cases of clefting will be discussed here.

Consider the following sentences:

- (36) a. casa grame baskɔre
 farmer village-in lives
 'The farmer lives in the village'
- b. casa æ kTa goru kinechilo
 farmer a cow bought
 'The farmer bought a cow'

The coreferential NP in either sentence is accessible to relativization, with the other sentence becoming the matrix clause. One of the two possibilities is:

- (36) c. casa, Je grame baskɔre, se æ kTa goru
 farmer who village-in lives he a cow
 kinechilo
 bought
 'The farmer, who lives in a village, bought a cow'

Subsequent to this application of a relativization rule, clefting rule can be applied. If the NP focused by clefting is casa 'farmer', we have the following result:

- (36) d. eTa càsa, Je grame baskɔre, se æ kTa goru
 it farmer who village-in lives he a cow
 kinechilo
 bought
 'It was the farmer, who lives in the village,
 (who) bought a cow'

Apart from the insertion of eTa 'it' in (36d), the relative clause pattern does not show much difference as a result of the application of the clefting rule as it retains the relative pronoun Je 'who' and the coreferential pronoun se 'he' like the usual relative clause pattern.

If the NP foccussed by clefting is æ kTa goru 'a cow' (i.e. a NP other than the one which is the head noun of the relative construction), a rather more complex change is involved:

- (36) e. eTa æ kTa goru, Ja casa kinechilo, Je
 it a cow that farmer bought who

grame baskore

village-in lives

'It was a cow that the farmer bought, who lives
in a village'

After inserting eTa 'it' initially to the sentence (36e) and focusing on æ kTa goru 'a cow', a new relative pronoun is introduced with æ kTa goru as its antecedent. The correlative pronoun of the relative construction is then deleted.

The same series of transformations is possible if both NPs are +human e.g.

(37) a. dokandar haistrite baskore
 shopkeeper High Street-in lives
 'The shopkeeper lives in the High Street'

b. dokandar pionke merechilo
 shopkeeper postman struck
 'The shop^{keeper} struck the postman'

c. dokandar, Je haistrite baskore, se pionke
 shopkeeper who High Street-in lives he postman
 merechilo
 struck
 'The shopkeeper, who lives in the High Street,
 struck the postman'

d. eTa hochche dokandar, Je haistrite baskore
 it is shopkeeper who High Street-in lives

se pionke merechilo

he postman struck

'It was the shopkeeper, who lives in the High Street, who struck the postman'

e. eTa hochche pion, Jake dokandar, Je

it is postman whom shopkeeper who

haisTriTe baskore (se) merechilo

High Street-in lives he struck

'It was the postman whom the shopkeeper, who lives in the High Street, struck'

Note that if the relative clause in (37e) is embedded within the main clause rather than being placed at the end, the correlative pronoun is optionally retained:

(37) f. eTa hochche pion, Jake dokandar merechilo

It is postman whom shopkeeper struck

Je haisTriTe baskore

who High Street-in lives

'It was the postman whom the shopkeeper struck, who lives in the High Street'

Such constructions as (37f) are less common than the type illustrated in (37e).

The examples which are given in (36) and (37) show that if the clefting transformation is applied to relative constructions, the sentence structure changes on focusing the different NPs in a complex construction which contains a relative clause. The transformational rule also

implies that clefting can be done after relativization. If the NP focused is the head noun of the relative clause, then the only required change is eTa-insertion. If any other NP is focused, then the correlative pronoun is deleted and a relative pronoun, having the focused NP as its antecedent, is introduced. Note, however, the slight modification of this statement that is required if the original relative clause is embedded within the matrix clause.

7.3 Pseudo-Cleft Sentences

7.3.1 Construction

Pseudo-clefts like clefts convey new information in their constituents through focus. The main difference between clefts and pseudo-clefts is that eTa 'it' is inserted as the subject in clefts and the wh-clause is the subject in pseudo-clefts. Both in cleft and pseudo-cleft construction, predicates are of the higher clauses. The following examples will show the distinction between a cleft and a pseudo-cleft sentence, where the first sentence occurs as a neutral sentence.

- (38) a. tomar bhalo ghumer d̄arkar
 your good sleep-of need
 'You need a good (sound) sleep'
- b. eTa bhalo ghum Ja tomar d̄arkar
 it good sleep which you need
 'It is a good sleep that you need'
- c. Ja tomar d̄arkar ta hochche bhalo ghum
 what you need that is good sleep
 'What you need is a good sleep'

In the above examples (38b) occurs as a cleft and (38c) as a pseudo-cleft. Both cleft and pseudo-cleft sentences are derived from the neutral sentence (38a) after adding constituents. They are transformationally related. eTa 'it' is added to the initial string in (38b) which is

followed by ja 'that', which may be taken as a correlative like a relative clause pattern. The initial clause of the neutral sentence is transferred at the end of the sentence in pseudo-cleft (38c). Like a cleft, the pseudo-cleft also has added new constituents, namely Ja 'what' and ta 'that', plus a be verb hochche 'is', the last of which may remain absent in cleft construction. So, it can be said that a pseudo-cleft is formed in Bengali with an initial wh-word, medial ta 'that' correlative, and a be verb which occurs after the correlative.

7.3.2 With and Without Negation

Culicover (1976: 126) mentions with respect to the constructions of pseudo-cleft sentences that a negative element of a verb may or may not be present in a sentence. The following examples will clarify the two-way function of verbs in a pseudo-cleft with or without any negation.

(39) Without any Negation

- a. Ja mou korechilo ta hochche se ghorer bati
 what Mou did that is she room-of light
 Jalie rekhechilo
 on put
 'What Mou did was that she put on the light of
 the room'
- b. Ja mou ceechilo ta hochche ækTa bhalo golpo
 what Mou wanted that is a good story

likhte

write-to

'What Mou wanted to write a good story'

(40) With Negation

- a. Ja mou korechilo ta hochche sara rat ghorer
 what Mou did that is all night room-of
bati Jalie rakheni
 light on put not

'What Mou did was not to put the light on of the
 room all night' (but to keep it off)

- b. Ja mou ceechilo ta hochche æ kTa galpo na
 what Mou wanted that is a story not
 likhte
 write-to

'What Mou wanted was not to write a story' (but
 to read one)

The answer to the question which is asserted in the sentences is given through negation, and negative the constituent of the sentence is always attached to the end of the verb phrase which occurs at the end of the sentence. In (40a), one gets answer of the verb korechilo 'did' this way: what Mou did, the answer is in the main verb phrase is that mou sara rat ghorer bati Jalie rakhe ni 'Mou did not put the light on of the room all night'. There are two important structural changes which occur when a neutral sentence becomes a pseudo-cleft: Ja 'what' is added

initially and the question which is embedded to the left side of the sentence gets an answer from the right hand side of the sentence. One point should be made clear is that pseudo-cleft sentences have similarities with headless relatives, a point which is also mentioned in Culicover (1976: 205). This similarity is superficial in the sense that headless relatives occur without heads but not the pseudo-clefts. Hence, only the first part of the pseudo-cleft bears similarities to the headless relatives. Compare the following sentences:

- (41) a. Ja mou porchilo, ta hochche æ kTa golper
 what Mou reading-was that is a story-of
 boi
 book
 'What Mou was reading was a story book'
- b. Ja mou kinechilo, ta hochche æ kTa boro
 what Mou bought that is a large
 khæ lna
 toy
 'What Mou bought was a large toy'
- c. Ja mœna dekhche, ta hochche æ kTa sundor
 what Moina looking that is a beautiful
 sari
 sari
 'What Moina is looking at is a beautiful sari'

The examples which are given in (41) are of pseudo-clefts

and show head nouns which occur at the end of the sentences. The first part of the sentences has similarities with headless relatives, e.g. Ja mou porchilo 'What Mou was reading', Ja mou kinechilo 'What Mou bought', and Ja mœna dekhche 'What Moina is looking at'. These sentences (better to say clauses) can be constructed into headless relatives after changing the second part of the sentences which contain heads. Examples:

- (42) a. Ja mou porchilo, ta tar mone nei
 what Mou reading-was that her mind-in not
 'What Mou read she cannot remember'
- b. Ja mou kinechilo, ta sobai pœchondo koreche
 what Mou bought that all liked has
 'What Mou bought was liked by all'
- c. Ja mœna dekhche, ta sobaike bolbe
 what Moina looking that all-to say-will
 'What Moina is looking at she will tell to all'

The apparent similarities between the pseudo-clefts and the headless relatives are due to initial wh-clauses or the first part of the sentences. However, structurally they are quite different.

7.3.3 Clefts and Pseudo-clefts

Like the clefts, the pseudo-clefts are also derived by a transformation from a neutral or a simple sentence. A neutral sentence is taken here as being one which is simple in its structure and does not contain a relative clause and focus is not assigned. If any wh-constituent is moved from its initial position, the raising rule is needed for the wh-constituent. This may be shown in the following examples.

(43) a. mou æ kTa gɔlper boi kinechilo

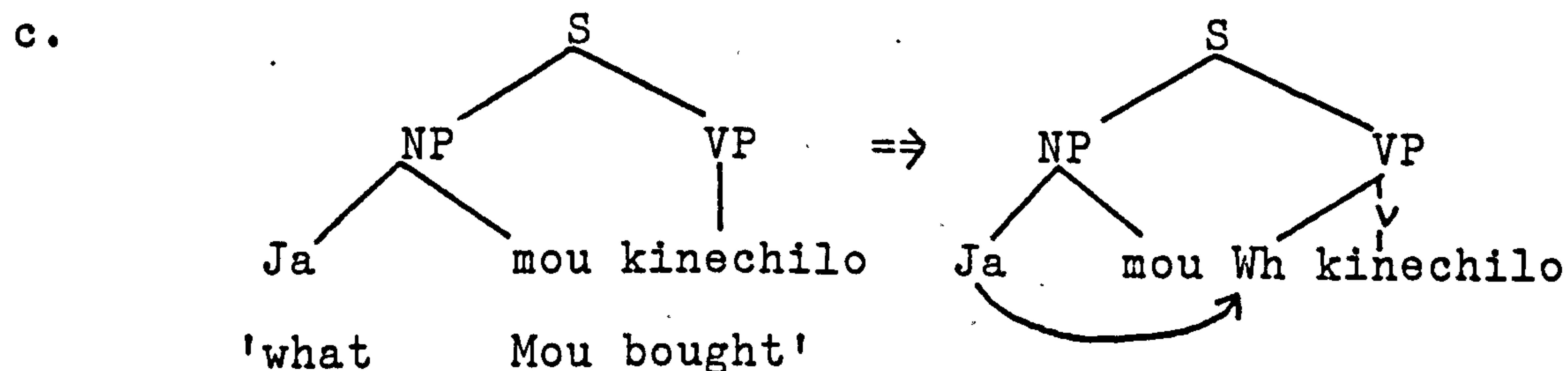
Mou a story-of book bought

'Mou bought a story book'

b. Ja mou kinechilo, ta hochche æ kTa gɔlper
 what mou bought that is a story-of
 boi

book

'What Mou bought (that) is a story book'



The comparison between clefts and pseudo-clefts is helpful in the sense that it shows the way the relative clause occurs in a cleft and pseudo-cleft as well as focusing extraposition rules in a sentence. This feature

can be illustrated later after comparing the structures of clefts and pseudo-clefts.

- (44) a. mou æ kTa gɔlper boi kinechilo
 Mou a story-of book bought
 'Mou bought a story book'
- b. Ja mou kinechilo, ta hochche æ kTa gɔlper
 what Mou bought that is a story-of
 boi
 book
 'What Mou bought was a story book'
- c. eTa æ kTa gɔlper boi, Ja mou kinechilo
 It a story book what Mou bought
 'It was a story book that Mou bought'

The neutral sentence (44a) has undergone transformations for cleft and pseudo-clefts in (44b) and (44c). Both in cleft and pseudo-clefts focus is assigned on gɔlper boi 'story book', though the focusing constituents are not in the same order in (44b) and (44c). Focusing constituent occurs in the initial part in cleft (44c) and at the end of the sentence in pseudo-cleft (44b). The relative clause, which also contains an NP, occurs at the beginning of the pseudo-cleft sentence (44b) and at the end of the cleft sentence (44c). The relative clause in the cleft sentence remains unextraposed, which is extraposed in pseudo-cleft. The focusing constituent in cleft occurs as the initial clause in (44c). It is clear from the above examples that

when a pseudo-cleft is formed, the relative clause is extraposed automatically and is transferred from initial to the final part of the sentence. If we want to extrapose the relative clause in a cleft sentence, a further transformation is needed as shown in the following examples.

(44) c. eTa æ kTa golper boi, Ja mou kinechilo
'It was a story book that Mou bought'

(45) eTa mou kinechilo, Ja hochche æ kTa golper
it Mou bought which is a story-of
boi
book
'It Mou bought which was a story book' (lit)

Akmajian (1979) and Higgins (1979) have made some interesting study on pseudo-cleft sentences. Higgins (1979: 19-20) mentions one point regarding the formation of pseudo-cleft sentences, which is already shown in the above examples (44c) and (45). This is: when a pseudo-cleft sentence is derived from a neutral or simple sentence, it should contain the phrase structure identical to the neutral or simple sentence. The form of a simple sentence is distributed in two ways in a pseudo-cleft sentence which can be stated in the following manner: (a) one part of the simple sentence exists in the subject phrase in a pseudo-cleft, and (b) the other part as the predicate phrase which gets focus. It should be mentioned here that when a relative clause is introduced in the pseudo-cleft sentence

the above structure of an English pseudo-cleft becomes different in Bengali as the correlative structure in Bengali is different from the English structure. When a relative clause is not introduced in a sentence, the above structure of pseudo-cleft is retained in Bengali (cf. 44a). This may be shown in the following examples.

- (46) a. mou aJ æ kTa gɔlper boi kineche (Neutral)
 Mou today a story-of book bought-has
 'Mou has bought a story book today'
- b. Ja mou aJ kineche, ta hochche æ kTa
 what Mou today bought-has that is a
 gɔlper boi
 story-of book
 'What Mou has bought today is a story book'

In (46), pseudo-cleft is formed from the neutral sentence (46a) and the phrase structures of both sentences are identical. The way the constituents of (46a) are dismembered in (46b) can easily be noticed. æ kTa gɔlper boi 'a story book' is the predicate complement in (46b) and focus is assigned to it. ta 'that' is the subject of the matrix sentence and hochche æ kTa gɔlper boi 'is a story book' is the predicate of it. Likewise, mou 'Mou' is the subject of the relative clause and Ja aJ kineche 'what has bought today' is the predicate of the clause. This shows the sharp contrast of the Bengali pseudo-cleft construction against the English. It may be said that this is the

usual pattern of Bengali when pseudo-cleft is derived from a neutral sentence.

7.3.4 Relative Clauses in Pseudo-clefts

Akmajian's (1979) analysis on the occurrence of the relative clauses in pseudo-clefts is equally interesting. The heads which occur in pseudo-cleft sentences may be either "bound relatives" or "free relatives" in his terms. "Bound relatives" are those which occur with full lexical heads ('restrictive' and 'non-restrictives' in our terms), whereas, the "free relatives" lack it. Compare the following sentences where the two varieties of pseudo-clefts are shown.

(47) Pseudo-clefts with Bound Relatives:

- a. mou aJ Je Jinis kinechilo, seTa holo æ kTa
 Mou today what thing bought that was a
 putul
 doll
 'What (thing) Mou bought today was a doll'
- b. mœena Je somoe bari phirechilo tœkhon tupur
 Moina which time home returned ' then noon
 baroTa
 twelve
 'It was twelve noon when Moina cam home'

(48) Pseudo-clefts with Free Relatives

a. mou Ja kinechilo, ta holo putul

Mou what bought that was doll

'What Mou bought was a doll'

b. mœna Jɔkhon bari phirechilo, tɔkhon dupur baroTa

Moina when home returned then noon twelve

'It was twelve noon when Moina came home'

Apparent dissimilarities of the above sentences, however, did not restrict for focusing items, i.e. focus assigned at the end of the sentences or after the post-copular constituents both in bound and free relatives in pseudo-cleft sentences.

Akmajian (1979: 19) points out that pseudo-cleft sentences differ from other sentences on initial clauses which have semantic variables. This is true for both bound and free relatives as shown in (49) and (50).

(49) Bound Relative

Je Jinis mœna kinechilo, ta hochche golap

what thing Moina bought that is rose

'The thing Moina bought was roses'

(50) Free Relative

Ja mœna kinechilo, ta hochche golap

what Moina bought that is rose

'What Moina bought was roses'

Jinis 'thing' occurs as the head noun in Bound Relative in (49). The head noun functions as a variable over semantic classes and is capable of conveying the meaning of any thing, which includes inanimateness of its class. Same in the free relative in the pseudo-cleft where the initial wh-words have also semantic variables. Variables may be replaced easily by focusing, which indicates that focus takes the place of the variables. This can be shown after following the examples already given in (49) and (50).

(51) mɔena æ kTa golap phul kinechilo

Moina a rose flower bought

'Moina bought a rose'

Both Jinis 'thing' in (49) and Ja 'what' in (50) have been dropped after assigning focus on golap phul 'rose (flower)'. .

CHAPTER EIGHT

Conclusion

The present study is based on different aspects of Bengali relativization. More emphasis is given to the structural aspects of relative clauses rather than the theoretical aspects of explaining rules. The rules are introduced only to explain different aspects of relativization. As would be expected, some methodological problems arose in finding rules for the language, as the work done to date using the transformational model has been largely on non-Aryan languages. As a result, some of the rules provided by transformational grammarians needed modification. The Bengali grammatical pattern is quite complex and needs supplementary transformational rules to describe its syntax.

Bengali relative pronouns are different from the interrogative pronouns and thus in this respect Bengali differs from English, in which the distinction between the relative and the interrogative pronouns has to do with their occurrences in a sentence rather than with their morphological form. Bengali grammar includes three relative pronouns which differ in honorific, non-honorific, human, non-human and inanimate properties. Je 'who' is a human and non-honorific, its honorific counterpart is Jini, Ja 'what' and Je 'what, that, which' are inanimate. The human Je and the inanimate Je differ in their occurrence in a

sentence. When both types of Je occur before the postcedent, they become deictic due to the presence of a close juncture between Je and the postcedent. A contrast between the two types of Je can be noticed in respect of their occurrence after the antecedent. The inanimate Je fails to occur after the antecedent.

Besides having different properties (animate vs inanimate, human vs non-human, honorific vs non-honorific, deictic vs non-deictic), Bengali relative pronouns are involved in different structures in regard to the use of the correlatives in matrix sentences. The common pattern of a Bengali relative clause shows its relative and correlative construction, i.e. the relative pronoun in the relative clause and the correlative marker in the matrix sentence. A relative construction can be made without a correlative, but not without a relative pronoun. Moreover, when an identical NP is replaced by a coreferential pronoun in the matrix sentence, the process shows the pronominalization of the NP. The relative-correlative construction in Bengali sentences shows the difficulties of employing the rules proposed by different linguists for relative clauses in other languages. As most of the rules are formulated for the English relative construction, they are not completely satisfactory for Bengali relative clauses. From this point of view, the Promotion Analysis, the Matching Analysis, Underlying Structure Conjunction Analysis have been described in the present dissertation, but as they fail to

explain the relative-correlative structure in Bengali, a new rule has been proposed for Bengali which can handle the Bengali relative clauses.

The most interesting feature of Bengali relative pronouns can be observed in the case of Je. It may occur as a relative pronoun, as a deictic relative pronoun and as a complementizer. Je becomes a deictic relative pronoun when it occurs preceding the postcedent, as a relative pronoun after the antecedent with a pause or in a headless relative clause. The occurrence of Je as a relative pronoun and as a complementizer shows identical word order in a sentence, except for the presence and absence of a comma intonation. Moreover, when Je occurs as a relative pronoun or as a complementizer, they include different types of correlatives, and this also helps to distinguish them.

Apart from the relative-correlative structure in Bengali relative clauses, the language also shows a different structure of relative clauses with double relatives. Like the single relatives, Bengali also allows double relatives as plural markers. Though Bengali has plural relative pronouns, the double relatives are also used side by side with the plural relatives to mark plurality. All the single relatives have related double relatives. Though the relative pronouns show their plural inflections (except inanimate Je and Ja) and allow double relatives, not all of them can occur following or preceding the head nouns in relative clauses. This shows the selectional restrictions

on the occurrence of different types of relative pronouns in relative clauses.

The different types of Bengali relative clauses are restrictive, non-restrictive, headless and stacked. In restrictive relative clauses, the relative pronouns precede the head nouns, while they follow the head nouns in non-restrictive relative clauses. As the relative pronouns occur before the head nouns in restrictive relative clauses, a close juncture exists between them, which also makes the relative clause deictic or definite. On the other hand, a comma intonation exists between the head noun and the relative pronoun in non-restrictive relative clauses which separates the relative clause from the head noun. The stacking of relative clauses is also possible in Bengali and the process shows the infinite structures of relative clauses. The most interesting aspect of Bengali relative constructions is the headless relative. The headless relatives are fairly common in Bengali. All the relative pronouns can constitute the headless relatives, except for inanimate Je (cf. 2.1.8).

Keenan and Comrie's (1977) Noun Phrase Accessibility is useful in explaining the Bengali relative clauses. The Accessibility Hierarchy (cf. 2.2.2) shows that Bengali allows all the relativizable positions. Subject, Direct Object, Indirect Object, Oblique Object, Genitive NP and Object of Comparison are easily accessible for relative clause formation in Bengali. In relative clause forming

strategies, case is included to show Prenom, Postnom and Internal strategies. As Bengali has SOV word structure for the sentence, it becomes easier to show the Internal Strategy due to the occurrence of the verb at the end of the sentence.

As case has been included in the discussion of the Noun Phrase Accessibility, no separate account of it has been given.

A short discussion has been made on the infinitive, gerundive and participial constructions after showing their application within the relative clause. This section (4.2) shows different possibilities of the occurrence of head nouns in infinitive, gerundive and participial constructions.

The complement constructions illustrate the occurrence of the complementizer Je 'that' and different types of complement clauses. As Je can occur in Bengali either as a relative pronoun, or as a deictic relative pronoun, or as a complementizer, an extended discussion has been made in Chapter Five to show the use of Je in the complement clause along with different types of complement clauses with two more complementizers other than Je. The occurrence of Je, as a complementizer in complement sentences, and as a relative pronoun in the relative clause necessitates the distinction between the two types of Je.

A few rules are included in Chapters Six and Seven. These include Gapping, Scrambling, Topicalization, Extraposition and Focus. Bengali allows the deletion of

identical verbs, object nouns and adverbs when some identical elements are dropped from the relative clauses. When the movement rule is applied to them, sentences show variable structures such as SVO, OVS, OSV, etc. When an original SOV pattern of a sentence is changed into a SVO, OVS, or OSV, the alternate sentence patterns become grammatical after the movement of the constituents from one position to another within a sentence. The scrambling rule shows the freedom of movement of certain major constituents in a sentence. The movement rule shows the condition of use of certain constituents in relation to context and sometimes difference in emphasis. Other movement rules like Topicalization or Extraposition are also included to show the movement of relative clauses to the end of the sentence. When a Bengali sentence retains the original SOV word order, the subject is marked as a topic, and after fronting the object noun initially, this can be marked as a topic. When topic is assigned to other constituents than the subject, the word order of a sentence could be either OVS, OSV, or something like this. Assigning topic on any constituent shows that the unmarked word order of SOV is not retained. This may also be seen in the case of a relative clause where the SOV word order of a relative clause is changed due to the topicalization rule. When an antecedent occurs before a relative clause, it is marked as a topic. In the case when topic is assigned to any other constituents than the antecedent, the constituents move

initially in place of the antecedent and the whole pattern of the relative clause is changed. The way subject and object topicalization takes place, is shown in Primary and Secondary Topicalization. In Secondary Topicalization, a comparison is made with Indonesian and this has shown the difference between Bengali and Indonesian. Extraposition in Bengali copies the clause which a sentence contains and replaces it by eTa 'it'. When a complement sentence occurs initially, it is moved to the end of the main sentence for the extraposition rule. When extraposition is applied to a relative clause, the latter moves to the end of the sentence and the matrix sentence moves forward. When extraposition is applied to a relative clause, it becomes easier to extrapose one which has a head. Moreover, a transitive verb is more easily moveable than an intransitive verb. When extraposition is applied to Bengali relative clauses the correlatives are dropped and the relative pronouns change their positions. The Bengali sentences occasionally impose restrictions on the insertion of eTa as a subject before honorific nouns and pronouns. eTa insertion does not create any problem before any inanimate or non-honorific nouns and pronouns. Moreover, extraposition is possible in Bengali when a relative clause is embedded in initial and medial positions, but not in final position. Three different types of extraposition, namely the extraposition from NP, complex NP shift, and extraposition from Sentential Subject are examined with their transformational rules.

There is a discussion of focus, which is applied to show the new information in a sentence. Presupposition is included only to the extent that it is relevant in describing focus. When focus is applied, the sentences show their differences in meaning before and after its application. Focus can be assigned to any major constituents of a sentence such as the subject noun, object noun, as well as to affirmative and negative sentences. The study of focus is also included in cleft and pseudo-cleft sentences. Cleft and pseudo-cleft constructions play important roles in focusing different constituents in a sentence and extraposing the relative clauses. When a cleft sentence is introduced in Bengali, the verb may remain absent either in the first or in the second clause or sentence. The reason is that occasionally a copular verb in present tense in a clause or in a sentence in Bengali may be deleted. A cleft sentence begins with eTa, which is optionally followed by a verb, and focus falls on the next element. Various cleft sentences can be derived from any neutral sentence. Relative clauses in cleft and pseudo-cleft sentences are shown after focusing different constituents of a sentence. eTa 'it' occurs preceding the antecedent in a relative clause and a cleft sentence may be constituted either with a verb or without it. The antecedent of the relative clause moves to the end of the sentence in a pseudo-cleft construction and Ja 'what' occurs as the subject of the sentence. As both eTa 'it' and Ja

'what' are inanimate, they create problem in the case of clefting any honorific nouns or pronouns, as eTa and Ja cannot stand as subjects of honorific nouns and pronouns.

The present study is an attempt to apply the generative transformational model to describe relativization in Bengali. Owing to the absence of any detailed description of relative pronouns and relative clauses in Bengali grammar, I had to depend solely on my intuition as a native speaker of standard colloquial Bengali to constitute different types of relative clauses and to formulate rules for them. The present study cannot claim to be final, but it gives up-to-date descriptions of relative pronouns, relative clauses and their relevant aspects as far as possible. All the examples which are illustrated are used in the colloquial pattern of the language. There are still many aspects which can be further investigated, such as the restrictive versus non-restrictive relative clauses and case frame for the relative clauses.

Bibliography

- Aissen, Judith (1972) "Where Do Relative Clauses Come From?"
In J.P. Kimball (1972; 187-198).
- Akmajian, Adrian (1970) "On Deriving Cleft Sentences From
Pseudo-cleft Sentences", LI 1.2, 149-168.
- ____ (1979) Aspects of the Grammar of Focus in English.
New York and London: Garland Publishing.
- Akmajian, Adrian & Heny, F.W. (1978) Introduction to the
Principles of Transformational Syntax, 3rd Edition.
Cambridge, Mass: The MIT Press.
- Anderson, S.R. & Kiparsky, P. (eds) (1973) A Festschrift
For Morris Halle. New York: Holt, Rinehart &
Winston.
- Andrews, Avery (1975) Studies in the Syntax of Relative and
Comparative Clauses. Unpublished Ph.D. disser-
tation, MIT.
- Annamalai, E. (1969) Adjectival Clauses in Tamil. Unpublished
Ph.D. dissertation, University of Chicago.
- Asher, R.E. (1982) Tamil. Lingua Descriptive Studies.
Amsterdam: North-Holland.
- Bach, Emmon (1968) "Nouns and Noun Phrases". In Emmon Bach
& Robert T. Harms (1968; 91-122).
- Bach, Emmon & Harms, Robert T. (eds) (1968) Universals in
Linguistic Theory. New York: Holt, Rinehart &
Winston.
- Bache, Carl & Jakobson, Leif Kvistgaard (1980) "On the
Distinction between Restrictive and Non-restrictive
Relative Clauses in Modern English". Lingua 52.3/4:
243-267.

- Bartsch, R. (1976) "Syntax and Semantics of Relative Clauses". Amsterdam Papers in Formal Grammar 1: 1-24.
- Berman, Arlene (1974) "Infinitival Relative Constructions", In Michael W. LaGaly et al (1974, 37-46).
- Bierwisch, M. & Heidolph, K. (eds) (1971) Progress in Linguistics, The Hague: Mouton.
- Bowers, John S. (1981) The Theory of Grammatical Relations. Ithaca and London: Cornell University Press.
- Bresnan, Joan W. (1970) "On Complementizers: Toward a Syntactic Theory of Complement Types". FL 6: 297-321.
- _____ (1979) Theory of Complementation in English Syntax. New York and London: Garland Publishing.
- Bresnan, Joan & Grimshaw, Jane (1978) "The Syntax of Free Relatives in English". LI 9.3: 331-391.
- Brown, E.K. (198) Relative Clauses in a Corpus of Scots Speech. SSRC Grant 5152/1.
- Brown, E.K. & Miller, J.E. (1980) Syntax: A Linguistic Introduction to Sentence Structure. London: Hutchinson.
- _____ (1982) Syntax: Generative Grammar. London: Hutchinson.
- Burt, M.K. (1971) From Deep to Surface Structure. New York: Harper and Row.
- Carlson, L. (1977) "Amount Relatives". Lg 53.3: 520-542.

- Chattopadhyaya, J. (1976) Complement Constructions in Bengali. Unpublished M.Litt. thesis, University of Delhi.
- Chomsky, Noam (1965) Aspects of the Theory of Syntax. Cambridge, Mass: The MIT Press.
- _____ (1971) "Deep Structure, Surface Structure, and Semantic Interpretation". In D.D. Steinberg & L.A. Jakobovits (1971: 183-216).
- Chomsky, Noam (1977) "On Wh-Movement". In Peter W. Culicover et al (1977: 71-132).
- Chomsky, Noam & Lasnik, H. (1977) "Filters and Control". LI 8.3: 425-504.
- Cinque, Guglielmo (1981) "On Keenan and Comrie's Primary Relativization Constraint". LI 12.2: 293-308.
- Cole, Peter; Wayne, Harbert; Sridhar, Shikaripur; Hashimoto, Sachiko; Nelson, Cecil; and Smietna, Diane (1977) "Noun Phrase Accessibility and Island Constraints". In Peter Cole and J.M. Sadock (1977: 27-46).
- Cole, Peter and Sadock, J.M. (eds) (1977) Syntax and Semantics, Volume 8. New York and London: Seminar Press.
- Culicover, Peter W. (1976) Syntax, New York: Academic Press.
- Culicover, Peter W; Wasow, Thomas & Akmajian, Adrian (eds) (1977) Formal Syntax. New York and London: Academic Press.

- Dasgupta, P. (1980) Questions and Relative and Complement Clauses in a Bangla Grammar. Unpublished Ph.D. dissertation, New York University, Australia.
- Declerck, R. (1978) "A Note on Evaluative Nouns and Relativization". JL 14.1: 59-76.
- Delorme, E. & Dougherty, R.C. (1972) "Appositive NP Constructions". FL 8: 1-28.
- Dik, Simon (1980) Studies in Functional Grammar. New York & London: Academic Press.
- Dougherty, Ray C. (1970) "A Grammar of Coordinate Conjunction, Part 1". Lg 46.4: 850-898.
- _____ (1971) "A Grammar of Coordinate Conjunction, Part 2", Lg 47.2, 298-339.
- Downing, Bruce T. (1978) "Some Universals of Relative Clause". In Joseph H. Greenberg (1978, 375-418).
- Drubig, Bernhard (1968) "Some Remarks on Relative Clauses in English". Journal of English as a Second Language, 23-40.
- Emonds, Joseph (1976) A Transformational Approach to English Syntax. New York & London: Academic Press.
- _____ (1979) "Appositive Relatives Have no Properties", LI 10.2: 211-242.
- Ferguson, Charles A. (1972) "Verbs of 'Being' in Bengali with a Note on Amharic". In John W.M. Verhaar (1972: 74-114).
- Fillmore, Charles J. & Langendoen, D.T. (eds) (1971) Studies in Linguistic Semantics. New York: Holt, Rinehart & Winston.

- Gívon, Talmy (1975) "Promotion, NP Accessibility, and Case Marking: Toward Understanding Grammar". Working Papers on Language Universals 19:55-125, Stanford University.
- Greenberg, Joseph H. (ed) (1978) Universals of Human Language. Stanford, California: Stanford University Press.
- Hagege, Claude (1976) "Relative Clause, Centre Embedding and Comprehensibility". LI 7.1: 198-201.
- Halliday, M.A.K. (1967) "Notes on Transitivity and Theme in English". JL 3.1: 37-81.
- (1967) "Notes on Transitivity and Theme in English". JL 3.2: 199-244.
- (1968) "Notes on Transitivity and Theme in English". JL 4.2: 179-215.
- Hankamer, Jorge (1973) "Unacceptable Ambiguity". LI 4.1: 17-68.
- (1979) Deletion in Coordinate Structures. New York & London: Garland Publishing.
- Higgins, F.R. (1973) "On J. Emond's Analysis of Extraposition". In J.P. Kimball (1973, 149-196).
- (1979) The Pseudo-Cleft Construction in English. New York & London: Garland Publishing.
- Huddleston, Rodney (1977) An Introduction to English Transformational Syntax. London: Longman.
- Jackendoff, Ray S. (1971) "Gapping and Related Rules". LI 2.1: 21-35.

- Jespersen, Otto (1927) A Modern English Grammar, Part 3, Syntax, Second Volume, Heidelberg: Carl Winter's Universitätsbuchhandlung.
- Junghare, Indira Y. (1973) "Restrictive Relative Clauses in Marathi", IL 34.4: 251-262.
- Kabir, H. (1976) Pronominalization in Bengali. Unpublished Ph.D. dissertation, University of Edinburgh.
- Kachru, Yamuna (1973) "Some Aspects of Pronominalization and Relative Clause Construction in Hindi-Urdu". SLS 3.2: 87-103.
- Karlsson, P. (ed) (1976) Papers from the Third Scandinavian Conference of Linguistics. Turku: Text Linguistic Research Group, Academy of Finland.
- Kendall, Martha B. (1974) "Relative Clause Formation and Topicalization in Yavapai". IJAL 40.2: 89-101.
- Keenan, Edward L. and Comrie, Bernard (1977) "Noun Phrase Accessibility and Universal Grammar". LI 8.1: 63-99.
- _____ (1979a) "Data on the Noun Phrase Accessibility Hierarchy". Lg 55.2: 333-351.
- Keenan, Edward L. & Comrie, Bernard (1979b) "Noun Phrase Accessibility Revisited". Lg 55.3: 649-664.
- Kimball, J.P. (ed) (1972) Syntax and Semantics, Volume 1. New York & London: Seminar Press.
- (1973) Syntax and Semantics, Volume 2. New York & London: Seminar Press.

- Klaiman, M.H. (1976) "Topicalization and Relativization in Hindi". IL 37.4: 315-333.
- Koutsoudas, A. (1971) "Gapping, Conjunction Reduction, and Coordinate Deletion". FL 7: 337-386.
- Kuno, Susumo (1974) "The Position of Relative Clauses and Conjunctions". LI 5.1: 117-143.
- _____ (1976) "Gapping: A Functional Analysis". LI 7.2: 300-318.
- Kuroda, S.-Y. (1969) "English Relativization and Certain Related Problems". In D.A. Reibel & S.A. Schane (1969, 264-287).
- LaGaly, M.W; Fox, Robert and Bruck, A. (eds) (1974) Papers From the Tenth Regional Meeting of the Chicago Linguistic Society, University of Chicago.
- Lakoff, George B. (1970) Irregularity in Syntax. New York: Holt, Rinehart & Winston.
- Langacker, Ronald W. (1972) Fundamentals of Linguistic Analysis. New York: Harcourt Brace Javanovich.
- Langendoen, D.T. (1969) The Study of Syntax. New York: Holt, Rinehart & Winston.
- Lees, Robert B. (1960) The Grammar of English Nominalization. The Hague: Mouton.
- _____ (1963) "Analysis of the 'Cleft Sentence' in English". Zeitschrift Fur Phonetik, Sprachwissenschaft Und Kommunikationsforschung 16: 371-388.
- Li, Charles N. (ed) (1970) Subject and Topic. New York & London: Academic Press.

Lyons, John (1977) Semantics, Vols.1 & 2. Cambridge:
Cambridge University Press.

Maling, Joan M. (1972) "On Gapping and Order of Constituents".
LI 3.1: 101-108.

Masica, Colin (1972) "Relative Clauses in South Asia". In
P.M. Peranteau et al (1972, 198-204).

Matthews, P.H. (1981) Syntax. Cambridge: Cambridge
University Press.

Maxwell, Daniel N. (1979) "Strategies of Relativization and
NP Accessibility". Lg 55.1: 352-371.

McCawley, James D. (1981) "The Syntax and Semantics of
English Relative Clauses". Lingua 53.2/3: 99-149.

Neijt-Kappen, V.A.H. (1979) Gapping - A Contribution to
Sentence Grammar. Dordrecht-Holland: Foris
Publication.

Partee, Barbara Hall (ed) (1970) Montague Grammar. New
York & London: Academic Press.

_____ (1975) "Montague Grammar and Transformational
Grammar". LI 6.2: 203-300.

Peranteau, P.M; Levi, J.N; and Phares, G.C. (eds) (1972) The
Chicago Which Hunt: Papers From the Relative
Clause Festival. Chicago: Chicago Linguistic
Society.

Perlmutter, David M. (1971) Deep and Surface Structure
Constraints in Syntax. New York: Holt, Rinehart
& Winston.

- Postal, Paul M. (1971) Cross-Over Phenomena. New York: Holt, Rinehart & Winston.
- Quirk, Randolph; Greenbaum, Sidney; Leech, Geoffrey; and Svartvik, Jan (1979) A Grammar of Contemporary English, Eighth Impression. London: Longman.
- Radford, Andrew (1981) Transformational Syntax. Cambridge: Cambridge University Press.
- Reibel, David A. & Schane, Sanford A. (eds) (1969) Modern Studies in English. New Jersey: Prentice-Hall.
- Rodman, R. (1970) "Scope Phenomena, Movement Transformation, and Relative Clauses". In Barbara Hall Partee (1970, 165-177).
- Rosenbaum, Peter S. (1967) The Grammar of English Complement Constructions. Cambridge, Mass: The MIT Press.
- Ross, John R. (1967) Constraints on Variables in Syntax. Unpublished Ph.D. dissertation, MIT.
- _____ (1970) "Gapping and Order of Constituents", In Manfred Bierwisch and Karl E. Heidolph (1970, 249-259).
- Sastri, H. (ed) (1916) Baudha Gan O Doha. Calcutta: Bangiya Sahitya Parisad.
- Schachter, Paul (1973) "Focus and Relativization". Lg 49.1: 19-46.
- Smith, Carlota (1964) "Determiners and Relative Clauses in Generative Grammar in English". In D.A. Reibel & S.A. Schane (1964: 247-263).

- Steinberg, D.D. & Jakobovits, L.A. (eds) (1971) Semantics.
Cambridge: Cambridge University Press.
- Stillings, J.T. (1975) "The Formulation of Gapping in
English as Evidence for Variable Types in
Syntactic Transformations". LA 1.3: 247-273.
- Stockwell, Robert P. (1977) Foundations of Syntactic
Theory. New Jersey: Prentice-Hall.
- Stockwell, Robert P; Schachter, Paul; and Partee, Barbara
Hall (1973) The Major Syntactic Structures of
English. New York: Holt, Rinehart & Winston.
- Takizala, A. (1973) "Focus and Relativization: the Case of
Kihung'an". In J.P. Kimball (1973: 123-148).
- Thompson, Sandra Annear (1968) "Relative Clause and
Conjunctions". Working Papers in Linguistics,
Report No.1, 80-99, Ohio State University.
- _____ (1971) "The Deep Structure of Relative Clauses",
In Charles J. Fillmore & D.T. Langendoen (1971:
79-94).
- Vergnaud, J.-R. (1974) French Relative Clauses, Unpublished
Ph.D. dissertation, MIT.
- Verhaar, John W.M. (ed) (1972) The Verb 'BE' and Its
Synonyms, Part 5. Dordrecht-Holland: D. Reidel
Publishing Company.
- Yeoh, Chiang Kee (1977) "Restrictive Relative Clauses in
Bahasa Malaysia". SLS 7.2: 82-105.
- Ziv, Yael (1973) "Why Can't Appositives be Extraposed?"
Papers in Linguistics 6.2: 143-156.